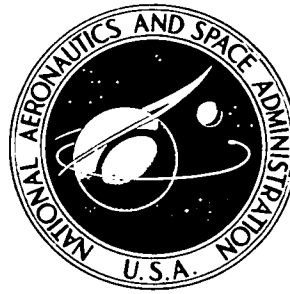


**NASA TECHNICAL
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NASA TM X-3547

**A COMPARISON OF THE EXPERIMENTAL AERODYNAMIC
CHARACTERISTICS OF AN OBLIQUE WING
WITH THOSE OF A SWEEP WING**

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NOMENCLATURE

The axes systems and sign conventions are presented in figure 1. Lift, drag, and pitching moments are presented about the stability axes system; and the side force, rolling moments, and yawing moments are presented about the body axes system. Reference lengths and wing area are given in table 1.

A	aspect ratio
b	wing span ($\Lambda = 45^\circ$)
C_L	lift coefficient, $\frac{\text{lift}}{qS}$
C_m	pitching-moment coefficient about moment center shown in figures 2(a) and 3(a), $\frac{\text{pitching moment}}{qS\bar{c}}$
C_n	yawing-moment coefficient, $\frac{\text{yawing moment}}{qSb}$
C_y	side-force coefficient, $\frac{\text{side force}}{qS}$
c	wing chord ($\Lambda = 0^\circ$)
c_{root}	wing root chord ($\Lambda = 0^\circ$)
$\bar{c}$	wing mean aerodynamic chord
C_D	drag coefficient, $\frac{\text{drag}}{qS}$
C_l	rolling-moment coefficient, $\frac{\text{rolling moment}}{qSb}$
$\frac{L}{D}$	lift-to-drag ratio
M	Mach number
q, Q	free-stream dynamic pressure, N/m^2
r	body radius
$\frac{RN}{L}$	unit Reynolds number in millions per meter
S	wing area
$\left(\frac{t}{c}\right)_{\text{max}}$	maximum wing thickness-to-chord ratio

x chordwise distance along airfoil
 x_1 axial distance along body from the 57.45 cm longitudinal station
 x_2, y_1, y_2 coordinates to define the wing tip (see figs. 2(b) and 3(b))
 z vertical distance from the chord plane of the airfoil
 α angle of attack, deg
 Λ sweep angle between a perpendicular to the body axis and the 0.25c line of the wing measured in a horizontal plane (right wing tip is forward for positive (Λ 's), deg

A COMPARISON OF THE EXPERIMENTAL AERODYNAMIC CHARACTERISTICS OF AN OBLIQUE WING WITH THOSE OF A SWEEP WING

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SUMMARY

Force and moment characteristics were measured for two trapezoidal oblique wings and a conventional swept wing mounted on a body of revolution at Mach numbers from 0.25 to 2.0. Both oblique wings had the same planform, but differed in profile and flexibility. One of the oblique wings was made of solid steel and had a maximum thickness-to-chord ratio of 4 percent. The other wing was built up by taking an aluminum wing (having a geometrically similar profile and planform to that of the steel wing) and adding epoxy material to the upper surface to increase the maximum thickness-to-chord ratio to 8.2 percent. The aspect ratio for both oblique wings when swept 45° , and for the swept wing with 45° of sweep was 4.1. Data were obtained at unit Reynolds numbers ranging from 3.3 to 8.2 million per meter in order to vary the dynamic pressure and to explore any flexibility effects. These data were compared with previously obtained data (ref. 5) on the aluminum wing before it was built up with epoxy.

Wing flexibility designed into the aluminum and built-up aluminum oblique wings increased the range of lift coefficients from 0.30 to 0.70 over which the pitching-moment curves were linear. However, flexibility did not improve the linearity of the rolling-moment curves and produced sizable side forces. At a Mach number of 0.95, the trapezoidal oblique wing had little or no improvement in the lift/drag ratios over those for a conventional swept wing of the same aspect ratio, sweep, and profile, probably because of the thinness of the wing profile. Thicker, highly cambered profiles previously investigated on oblique wings showed considerable improvement in the maximum lift/drag ratios over those for a conventional swept wing with the same profiles throughout a Mach number range from 0.6 to 1.2.

INTRODUCTION

An oblique wing for highly maneuverable aircraft, was investigated (refs. 1 and 2) as a possible means of improving both the maximum lift-to-drag ratios at transonic Mach numbers (with the wing swept), and the landing characteristics (with the wing unswept). At the high lift required for such aircraft, however, oblique wings incur asymmetric spanwise stalling resulting in nonlinear pitching-, rolling-, and yawing-moment curves. Several possible solutions to this problem were investigated: (a) fixed upward bending of the wing panels (refs. 2 and 3); (b) Krüger nose flaps (ref. 4); and (c) designed flexibility to give variable upward bending of the wing panels (ref. 5).

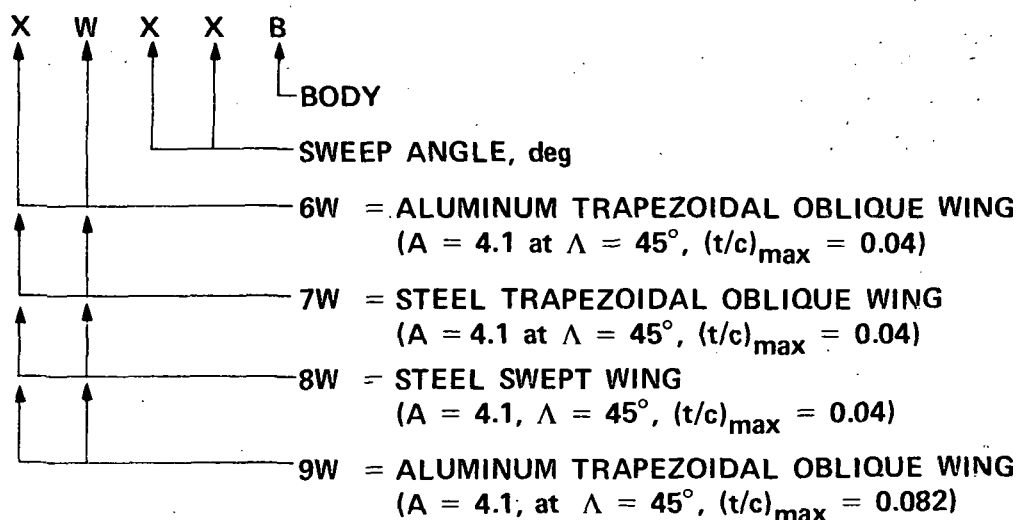
*Project Engineer, ARO, Inc., Moffett Field, Calif. 94035.

To obtain the desired flexibility (ref. 5), an oblique wing was made of solid aluminum with a maximum thickness-to-chord ratio of only 4 percent. It was found that at the design flow conditions, this aluminum wing had nearly linear moment curves indicating that as a result of wing flexibility, the wing was "self-relieving." However, because of the thinness of the profile, it is suspected that flow separation probably occurred near the wing leading edge at a low lift coefficient. In an attempt to alleviate this problem in the present investigation, the maximum thickness of the profile was approximately doubled and the leading-edge thickness was increased considerably more than double by reshaping the upper surface after an epoxy material was added. Wing flexibility was expected to be nearly the same as for the thin wing because of the low value of the modulus of elasticity for the added material.

In contrast to the elliptical wing planform used in references 1 through 4, the flexible aluminum wings tested in the present investigation had straight leading and trailing edges, and wing spans that were 15 percent greater than those for the elliptical wing previously tested. The planform of these flexible wings approximated the planform given by R. T. Jones (ref. 6) which specifies the optimum planform for minimum induced drag for a given lift and root bending moment. However, for these specified conditions (with the wing span as a free variable), the optimum planform is not elliptical.

The present experimental investigation was undertaken to study further the effects of wing flexibility on the forces and moments of oblique wings, and to compare the aerodynamic efficiency of such wings at transonic Mach numbers with that of a conventional swept wing having a maximum thickness of 4 percent chord. With the two oblique wings swept 45° , both wings have an aspect ratio of 4.1. The unit Reynolds number was varied from 3.3 to 8.2 million per meter in order to measure the effect of flexibility resulting from dynamic-pressure changes on the linearity of the moment curves. Results for the aluminum and the built-up aluminum oblique wings, and for the steel oblique wing are compared throughout the Mach number range from 0.25 to 2.0.

CONFIGURATION CODE



TEST FACILITY

The Ames 6- by 6-Foot Wind Tunnel is a variable pressure, continuous flow, closed return-type facility. The nozzle ahead of the test section consists of an asymmetric sliding block which permits a continuous variation of Mach number from 0.25 to 2.3. The test section has a perforated floor and ceiling for boundary-layer removal to permit transonic testing.

MODEL DESCRIPTION

The model consisted of a Sears-Haack body of revolution (designed to have minimum wave drag for a given length and volume) on which three different wings were mounted. Two of the three wings were trapezoidal which could be mounted on the body at different sweep angles. The third wing was a conventional swept wing having 45° of sweepback.

With different fairing blocks installed under the wings, the model could accommodate the oblique wings swept 0° , 45° , 50° , 55° , and 60° or the conventional swept wing as indicated in figures 2(a) and 3(a), respectively. Dimensional details of the body and the fairing blocks are given in table 3 of reference 1. The oblique wings had an aspect ratio of 7.9 ($\Lambda = 0^\circ$) or 4.1 ($\Lambda = 45^\circ$) and straight leading and trailing edges with modified elliptical wing tips as shown in figure 2(b). The swept wing had an aspect ratio of 4.1, its 0.25 chordline swept 45° and straight leading and trailing edges with modified elliptical tips as shown in figure 3(b). One oblique wing and the swept wing were made of stainless steel, had the NACA 65A204 profile perpendicular to their 0.25-chordlines, and had the same planform area. The other oblique wing was built up by taking an aluminum wing (geometrically similar in planform and thickness to that of the steel oblique wing) and adding epoxy material to the upper surface to make the maximum thickness-to-chord ratio 8.2 percent. This modified profile was developed on the Jameson-Hicks-Vanderplaats optimization program to be "shock free" at a Mach number of 0.6 and an angle of attack of 0° . The modified profile is compared with the NACA 65A204 in figure 4. This aluminum oblique wing with a modified profile was expected to have the same flexibility as the thin aluminum oblique wing investigated in reference 5, because the modulus of elasticity of the epoxy material is less than one-tenth that of aluminum. To prevent flaking of the epoxy material (fig. 5), slots (0.0635 cm in width) were cut in the epoxy material at various spanwise stations. Coordinates for the NACA 65A204 and the modified profile are presented in tables 2 and 3, respectively. The oblique wings had the same straight-edged planforms that approximated the R. T. Jones optimum planform (with curved edges) for a given area and root bending moment. The wing span was 15 percent greater than the wing span of the elliptical wing of references 1 and 2 in accordance with the Jones' concept of reference 6.

DATA REDUCTION AND TEST PROCEDURE

The model was sting supported through its base on a six-component electrical strain-gage balance as shown in figures 6 and 7. Measured drag forces were corrected to a condition corresponding to having the free-stream static pressure on the base of the model. Moment data are presented about moment centers located as shown in figures 2(a) and 3(a), $0.4c_{\text{root}}$ ($\Lambda = 0^\circ$) for the oblique

wing and $0.25\bar{c}$ for the swept wing. Reference lengths and the wing area used in the reduction of the data are given in table 1.

Boundary-layer transition strips (0.1905 cm wide), consisting of random distribution of glass spheres 0.01905 cm in diameter, were placed on the upper and lower surface of the wing 0.762 cm downstream of the wing leading edge and on the body 2.54 cm behind its tip. Sublimation studies made on the elliptical oblique wing (ref. 1) at wing sweep angles of 0° and 45° indicate that the boundary layer was tripped near the transition strips at $\alpha = 0^\circ$ and 10° . Estimates based on the size of the glass spheres required to cause transition at other sweep angles and Mach numbers in reference 1 indicate that the size chosen in the present investigation should be adequate.

Data were obtained for both the oblique wing and the swept wing at Mach numbers of 0.25, 0.4, 0.6, 0.8, 0.9, 0.95, 1.1, 1.2, 1.6, and 2.0. At each Mach number, the model was tested at unit Reynolds numbers ranging from $3.3 \times 10^6/\text{m}$ to $8.2 \times 10^6/\text{m}$ and throughout an angle-of-attack range of -3° to 22° . Angle of attack was indicated by an electrical dangleometer mounted in the model support strut located downstream of the sting. Corrections were applied to the indicated angle of attack for balance and sting deflections.

RESULTS AND DISCUSSION

Force and moment coefficients are presented for each of the wing-body combinations at each of the test Mach numbers. Table 4 shows the index of the figures for the various configurations. Results for the aluminum oblique wing with the modified NACA 65A204 profile are presented in figures 8 through 48, and the results for the steel oblique wing with the NACA 65A204 profile are presented in figures 49 through 89. Results for the steel swept wing with the NACA 65A204 profile are presented in figures 90 through 98. Finally, at a Mach number of 0.95 and a sweep angle of 45° , a comparison of the results for all of the above wings and the aluminum oblique wing with the NACA 65A204 profile (previously investigated in ref. 5) is presented in figure 99.

A comparison of the pitching-moment data for the aluminum oblique wings (with either profile) with that for the steel oblique wing is shown in figure 99(c). For the steel oblique wing, the pitching-moment curves were linear up to a $C_L \cong 0.3$ while the pitching-moment curves for the aluminum wings were linear up to a $C_L \cong 0.7$, indicating that wing flexibility increases the range of lift coefficients over which the pitching moment curves are linear. For reasonable center-of-gravity locations, the swept wing exhibited the usual "pitch-up" tendencies above a $C_L \cong 0.4$. Wing flexibility, which had a very small effect in linearizing the rolling-moment curves, produced sizable side forces as shown in figure 99(e). It is interesting to note that the oblique wing (7W45B) with the thinner wing profile had only a slightly higher maximum lift/drag ratio than the swept wing (8W45B), and that the lift/drag ratios for the thicker oblique wing (9W45B) were only superior to the swept wing (8W45B) between lift coefficients of about 0.4 and 0.6 as shown in figure 99(d). This result is different from the result shown previously in reference 2 for the elliptical wings for which the oblique wing configuration had considerably higher maximum lift/drag ratios than the conventional swept wing at all Mach numbers. This difference in result is believed related to the difference in the airfoils for the two investigations, the elliptical wings having a highly cambered thick airfoil ($(t/c)_{\text{max}} \cong 0.10$ along the wing span) and the trapezoidal wings having the thin NACA 65A204 airfoil with practically no camber. Therefore, it must be concluded that to provide

maximum aerodynamic efficiency, the oblique-wing concept has application primarily to wings designed with relatively thick and cambered airfoils.

Ames Research Center
National Aeronautics and Space Administration
Moffett Field, Calif. 94035, January 25, 1977

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3. Hopkins, Edward J.: Effects of Wing Bend on the Aerodynamic Characteristics of a Low Aspect Ratio Oblique Wing. AIAA Preprint 75-995, AIAA 1975 Aircraft Systems and Technology Meeting, Los Angeles, Calif., August 4-7, 1975.
4. Hopkins, Edward J.; and Lovette, George H.: Effect of Krüger Nose Flaps on the Experimental Force and Moment Characteristics of an Oblique Wing. NASA TM X-3372, 1976.
5. Hopkins, Edward J.; and Yee, Sam C.: Effect of Wing Flexibility on the Experimental Aerodynamic Characteristics of an Oblique Wing. NASA TM X-3460, 1977.
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TABLE 1.— MODEL GEOMETRY, REFERENCE LENGTHS AND AREAS

Body

Radius	$r = 3.856 \{1 - [1 - (2x_1 / 114.91)]^2\}^{3/4} \text{ cm}$
Length	
Closed	114.91 cm
Cutoff	91.44 cm
Maximum diameter	7.71 cm

Straight-tapered oblique wings

Span ($\Lambda = 0^\circ$)	104.08 cm
Span (reference), b	74.80 cm
Area (reference) S	1365.09 cm ²
Mean aerodynamic chord (reference), c	21.62 cm
Aspect ratio ($\Lambda = 0^\circ$)	7.9
Aspect ratio ($\Lambda = 45^\circ$)	4.1
Root chord	22.51 cm
Tip chord (projected)	3.81 cm
Taper ratio	0.169
Incidence relative to body centerline	0°
Profiles perpendicular to the 0.25c line	NACA 65A204 or modified NACA 65A204 (see tables 2 and 3 and fig. 4)

Straight-tapered swept wing

Span (reference), b	74.80 cm
Area (reference), S	1365.09 cm ²
Mean aerodynamic chord (reference), $\bar{c}$	21.62 cm
Aspect ratio	4.1
Root chord	31.83 cm
Tip chord (projected)	4.67 cm
Taper ratio	0.147
Incidence relative to body centerline	0°
Profile perpendicular to 0.25c line	NACA 65A204 (see table 2 and fig. 4)

TABLE 2:— COORDINATES FOR THE NACA 65A204 PROFILE

x/c	z/c	x/c	z/c
0	0	0	0
.00040	.00111	.00060	-.00096
.00086	.00160	.00114	-.00132
.00133	.00198	.00167	-.00158
.00180	.00231	.00220	-.00180
.00228	.00211	.00272	-.00199
.00276	.00287	.00324	-.00215
.00324	.00312	.00376	-.00229
.00421	.00356	.00479	-.00253
.00519	.00395	.00581	-.00273
.00617	.00431	.00683	-.00291
.00716	.00464	.00784	-.00306
.00815	.00496	.00885	-.00320
.00914	.00525	.00986	-.00333
.01013	.00554	.01087	-.00345
.01112	.00581	.01188	-.00356
.01212	.00607	.01288	-.00366
.01958	.00776	.02042	-.00423
.02456	.00871	.02544	-.00449
.02955	.00956	.03045	-.00469
.03454	.01033	.03546	-.00484
.03953	.01106	.04047	-.00497
.04453	.01174	.04547	-.00508
.04952	.01241	.05048	-.00519
.05452	.01305	.05548	-.00531
.05951	.01369	.06049	-.00542
.06451	.01431	.06549	-.00554
.06951	.01491	.07049	-.00566
.07450	.01549	.07550	-.00577
.07950	.01606	.08050	-.00587
.08450	.01660	.08550	-.00597
.08950	.01713	.09050	-.00605
.09450	.01764	.09550	-.00614
.09950	.01814	.10050	-.00622
.14952	.02243	.15048	-.00682
.19956	.02579	.20044	-.00719
.24961	.02841	.25039	-.00738
.29968	.03041	.30033	-.00744
.34975	.03185	.35026	-.00737
.39982	.03275	.40018	-.00717
.44990	.03309	.45010	-.00680
.49998	.03282	.50002	-.00622
.55005	.03193	.54995	-.00541
.60012	.03043	.59988	-.00440
.65019	.02839	.64981	-.00329
.70024	.02583	.69976	-.00217
.75029	.02273	.75971	-.00113
.80035	.01903	.79965	-.00034
.85034	.01453	.84966	-.00010
.90024	.00983	.89976	-.00002
.95012	.00491	.94988	-.00001
1.00000	.00000	1.00000	.00000

TABLE 3.— COORDINATES FOR THE MODIFIED NACA 65A204 PROFILE

x/c	z/c	x/c	z/c
0	0	0	0
.00040	.00449	.00060	-.00096
.00080	.00578	.00114	-.00132
.00100	.00632	.00167	-.00158
.00200	.00839	.00220	-.00180
.00300	.00995	.00272	-.00199
.00400	.01123	.00376	-.00229
.00500	.01232	.00479	-.00253
.01000	.01661	.00986	-.00333
.02000	.02259	.02042	-.00423
.03000	.02702	.03045	-.00469
.04000	.03076	.04047	-.00497
.05000	.03409	.05048	-.00519
.06000	.03713	.06049	-.00542
.07000	.03993	.07049	-.00566
.08000	.04252	.08050	-.00587
.10000	.04715	.10050	-.00622
.15000	.05664	.15048	-.00682
.20000	.06403	.20044	-.00719
.25000	.06983	.25039	-.00738
.30000	.07434	.30033	-.00744
.35000	.07774	.35026	-.00737
.40000	.08005	.40018	-.00717
.45000	.08137	.45010	-.00680
.50000	.08165	.50002	-.00622
.55000	.08087	.54995	-.00541
.60000	.07887	.59988	-.00440
.65000	.07547	.64981	-.00329
.70000	.07037	.69976	-.00217
.75000	.06259	.75971	-.00113
.80000	.05178	.79965	-.00034
.85000	.03925	.84966	-.00010
.90000	.02536	.89976	-.00002
.95000	.01126	.94988	-.00001
1.00000	.00000	1.00000	.00000

TABLE 4.— INDEX OF DATA FIGURES

Mach number, <i>M</i>	Sweep, Λ , deg	Wing configuration	Figure
0.4 – 2.0	45	Aluminum oblique, modified NACA 65A204 profile	8 – 16
.4 – 2.0	50	Aluminum oblique, modified NACA 65A204 profile	17 – 25
.4 – 2.0	55	Aluminum oblique, modified NACA 65A204 profile	26 – 34
.4 – 2.0	60	Aluminum oblique, modified NACA 65A204 profile	35 – 43
.4 – .95	0	Aluminum oblique, modified NACA 65A204 profile	44 – 48
.4 – 2.0	45	Steel oblique, NACA 65A204 profile	49 – 57
.4 – 2.0	50	Steel oblique, NACA 65A204 profile	58 – 66
.4 – 2.0	55	Steel oblique, NACA 65A204 profile	67 – 75
.4 – 2.0	60	Steel oblique, NACA 65A204 profile	76 – 84
.4 – .95	0	Steel oblique, NACA 65A204 profile	85 – 89
.4 – 2.0	45	Steel swept, NACA 65A204 profile	90 – 98
.95	45	a. Aluminum oblique, NACA 65A204 profile. b. Aluminum oblique, modified NACA 65A204 profile c. Steel oblique, NACA 65A204 profile d. Steel swept, NACA 65A204 profile	99

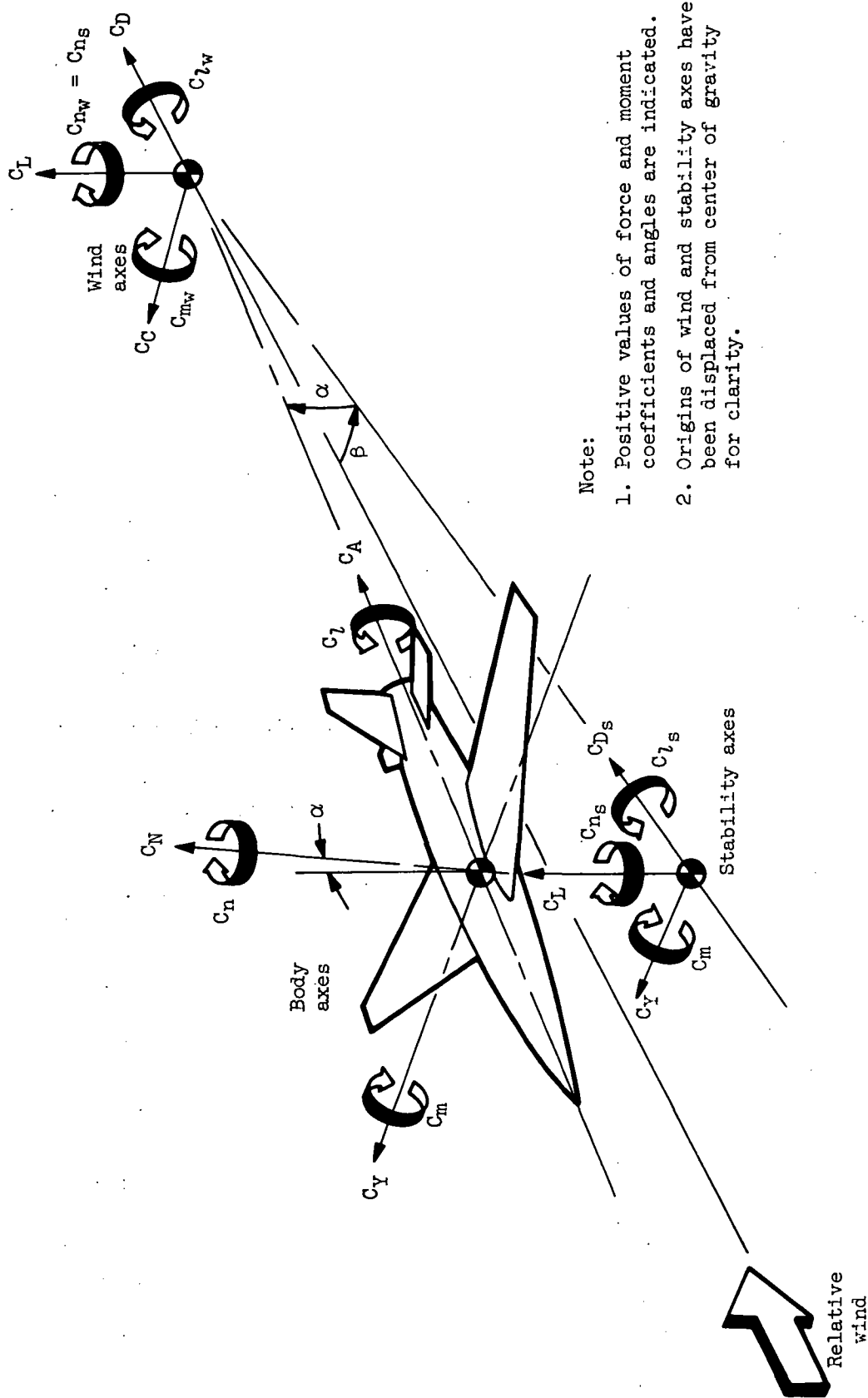
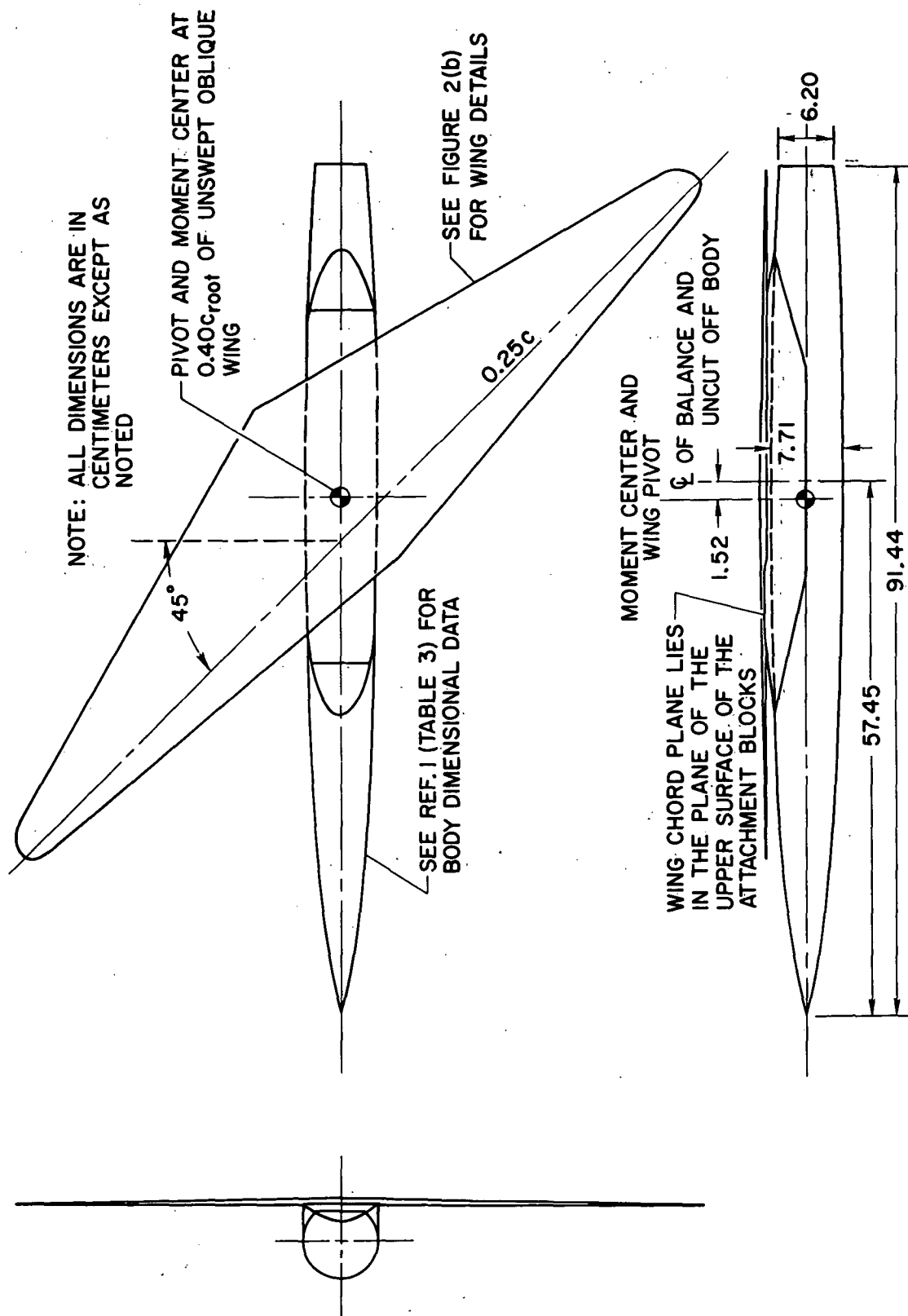
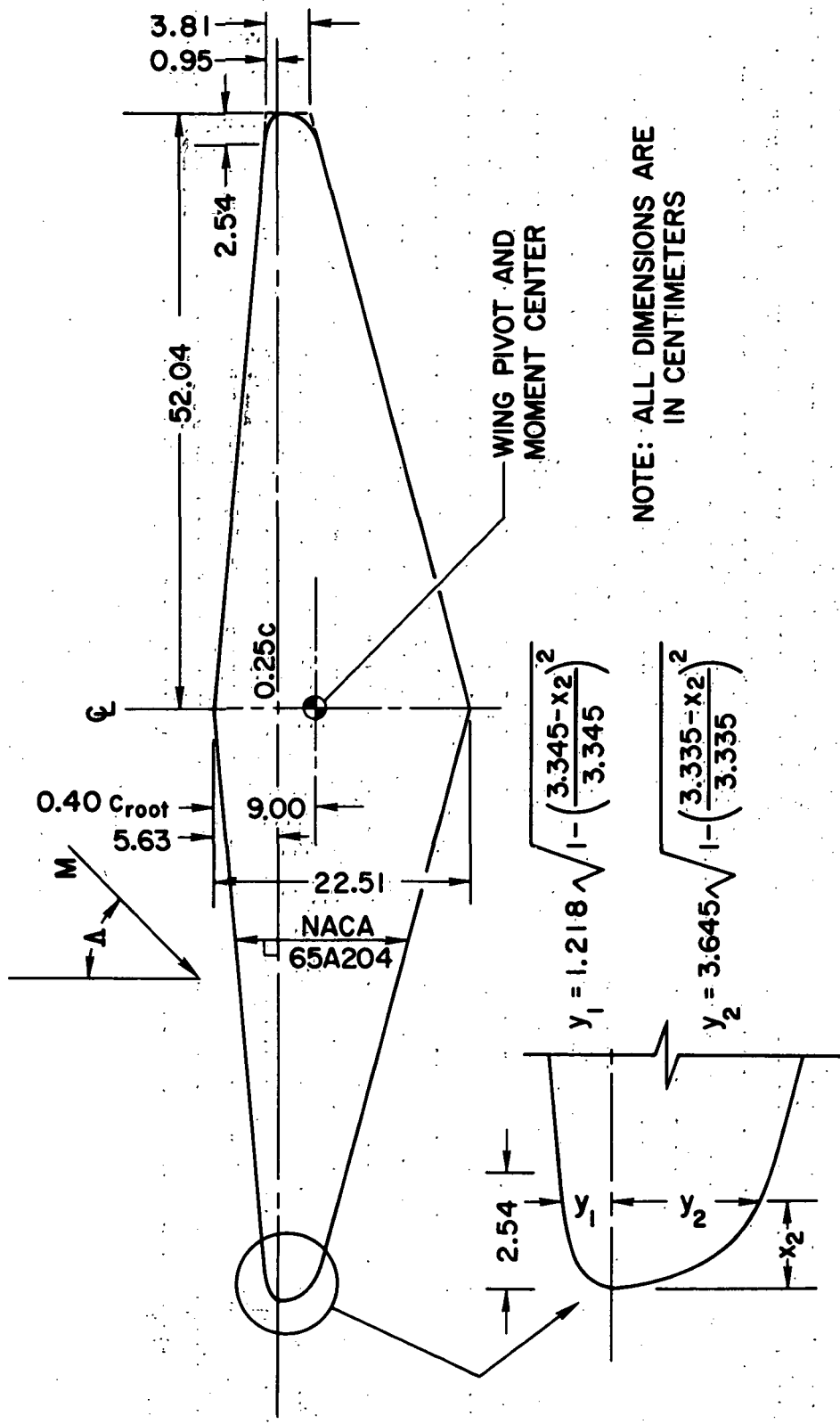


Figure 1.- Axes systems.



(a) Wing mounted on top of body.

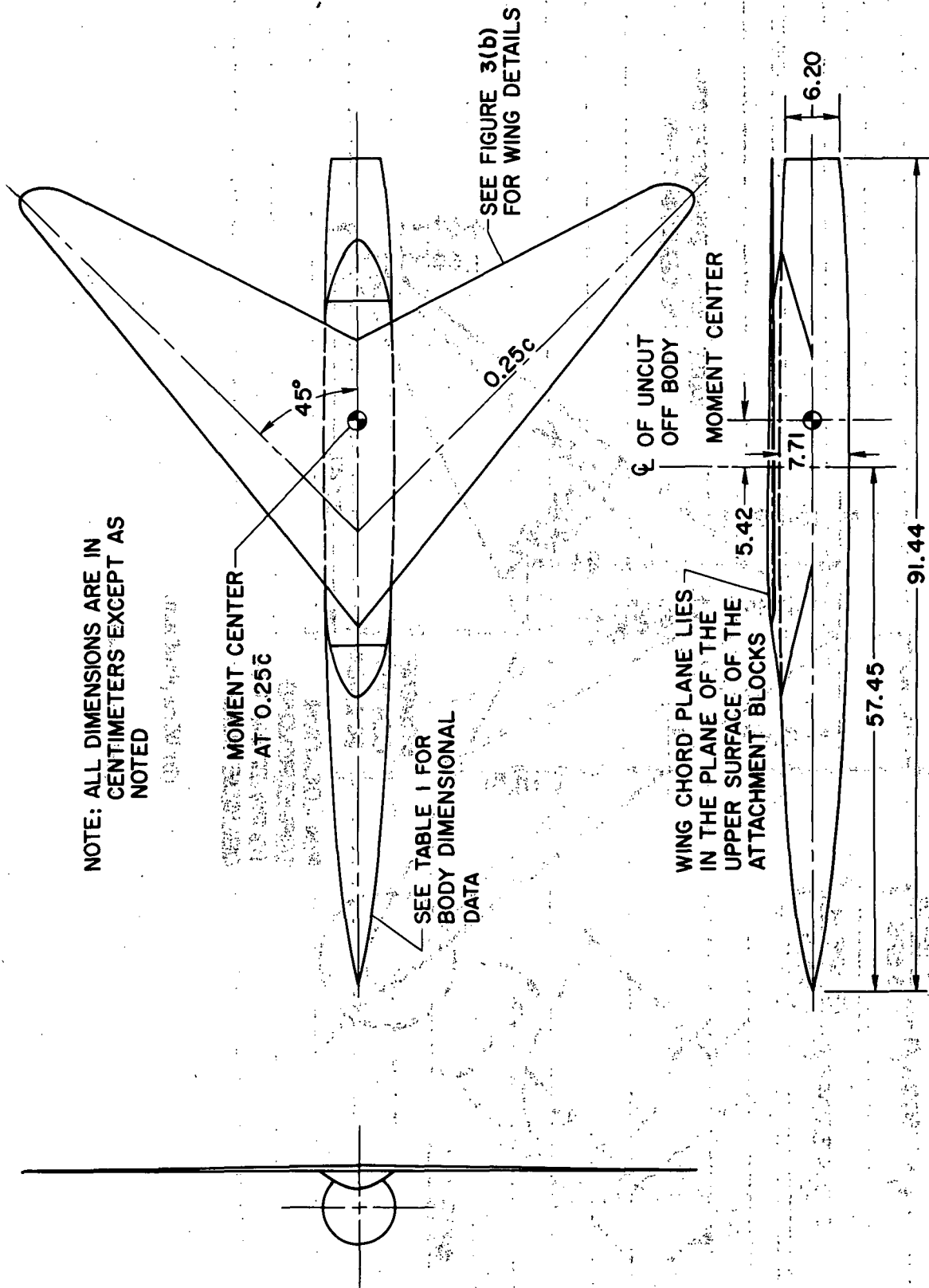
Figure 2.— Straight-tapered oblique wing and body details.



NOTE: ALL DIMENSIONS ARE IN CENTIMETERS

(b) Wing planform.

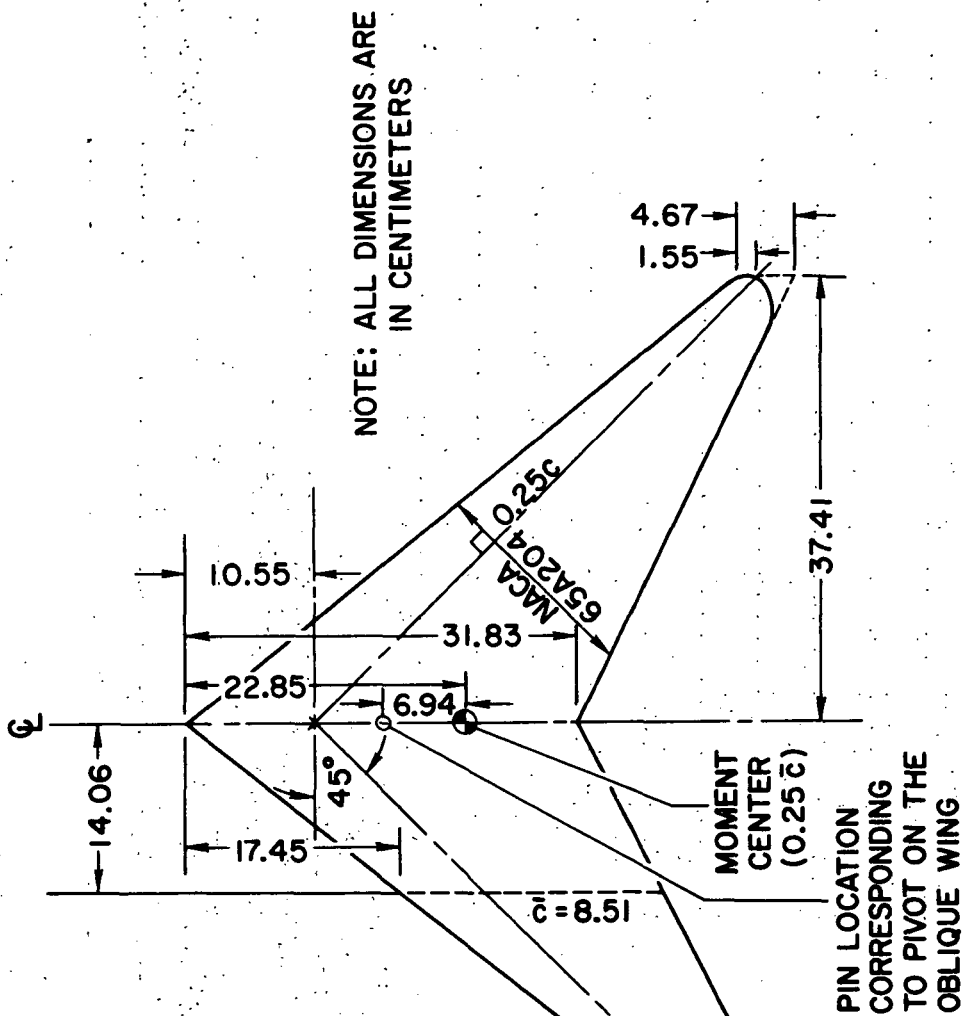
Figure 2. - Concluded.



(a) Wing mounted on top of body.

Figure 3.— Swept wing and body details.

$$y_2 = 3.904 \sqrt{1 - \left(\frac{3.526 - x_2}{3.526} \right)^2}$$



(b) Wing platform.

Figure 3.—Concluded.

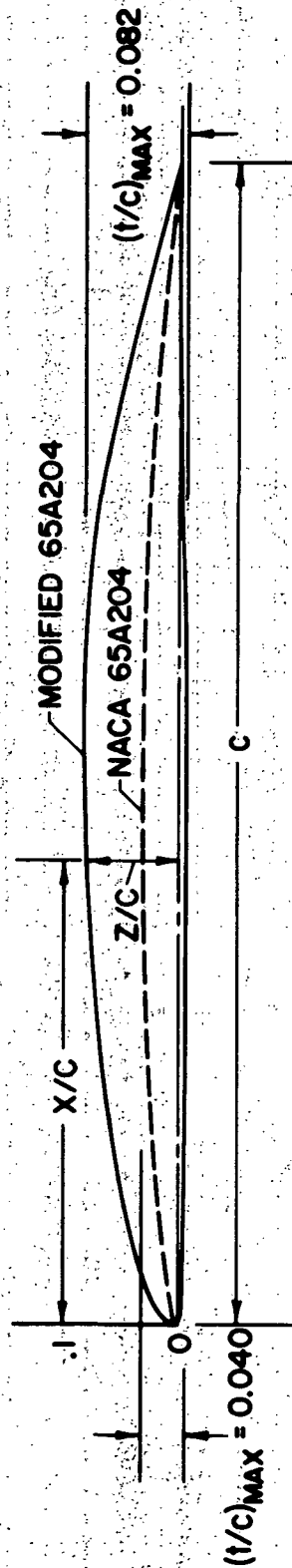


Figure 4.— Comparison between the NACA 65A204 and the modified NACA 65A204 profiles.

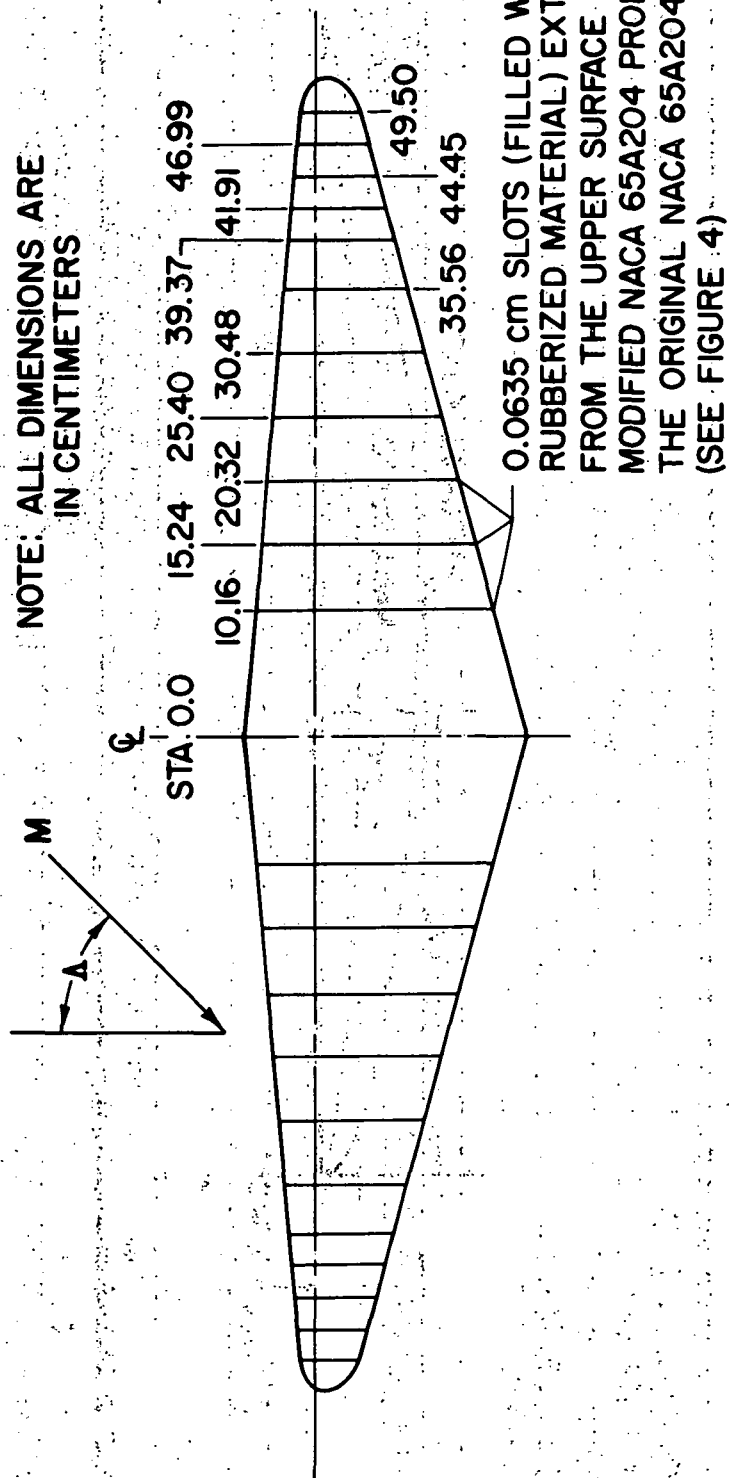


Figure 5.— Slot details for the oblique wing with the modified NACA 65A204 profile.

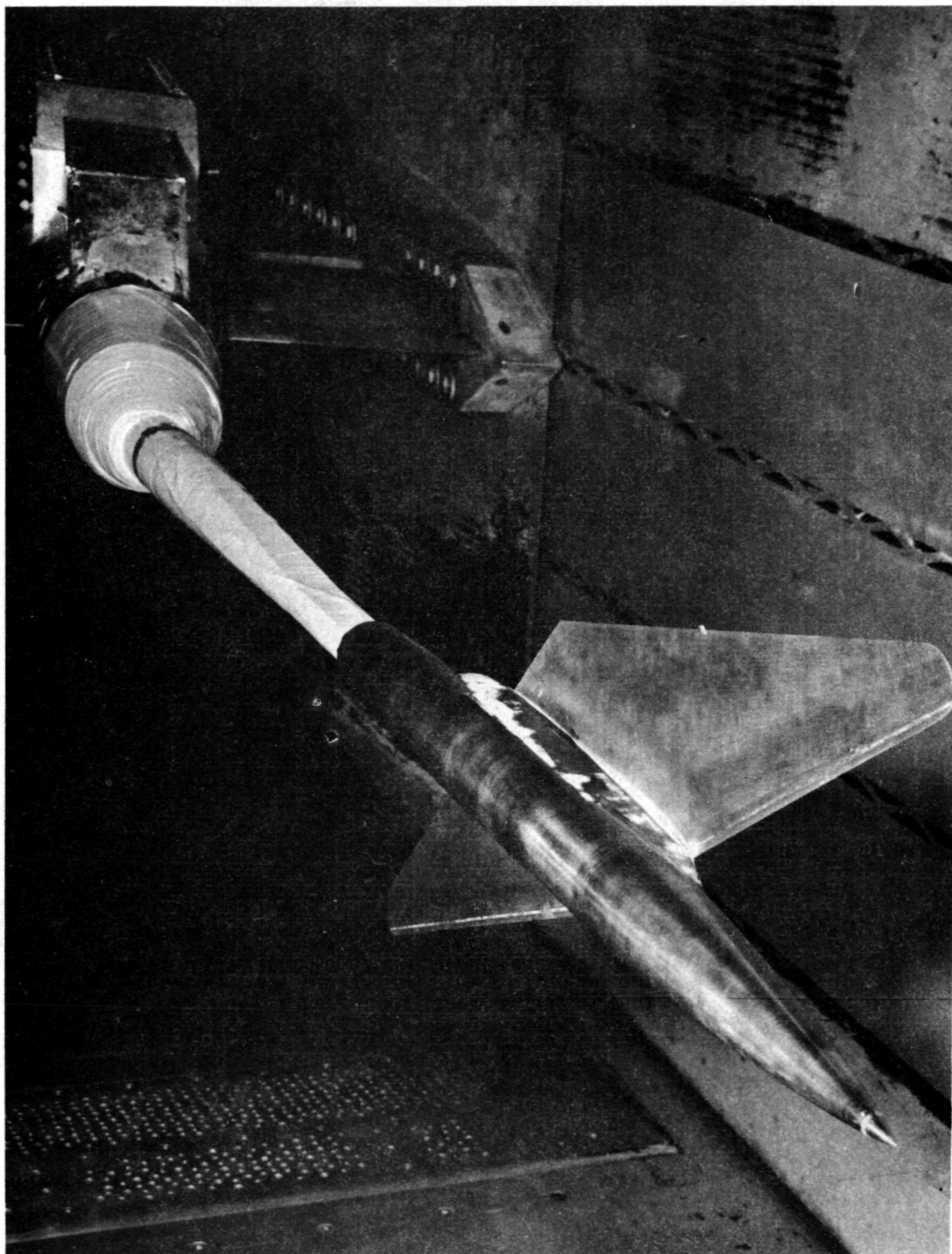


Figure 6.— Photograph of the oblique wing ($\Lambda = 45^\circ$) mounted on top of the body of revolution
(model is pitched in the $+\alpha$ direction toward the test section floor).

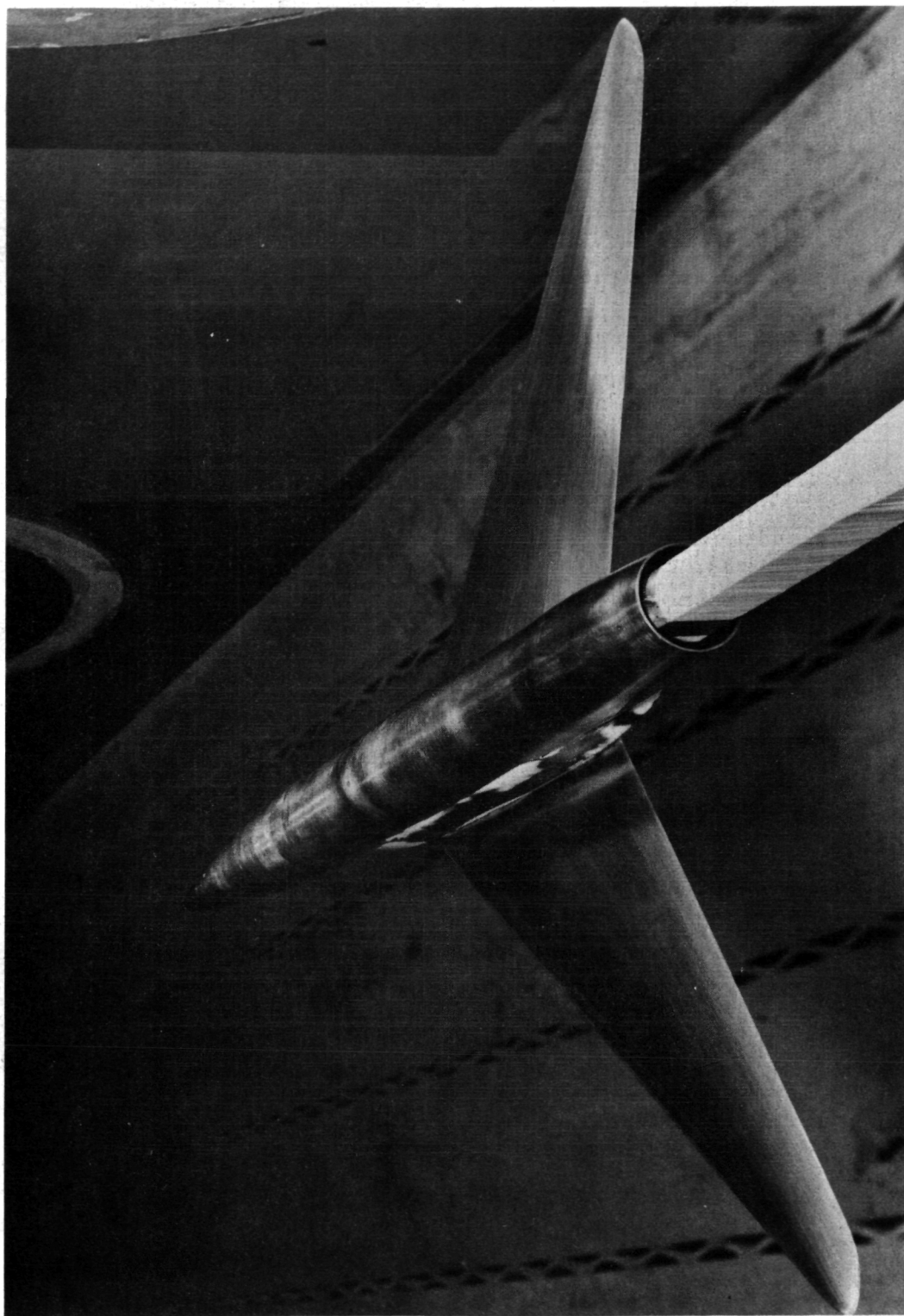


Figure 7.— Photograph of the swept wing with 45° of sweep mounted on top of the body of revolution.

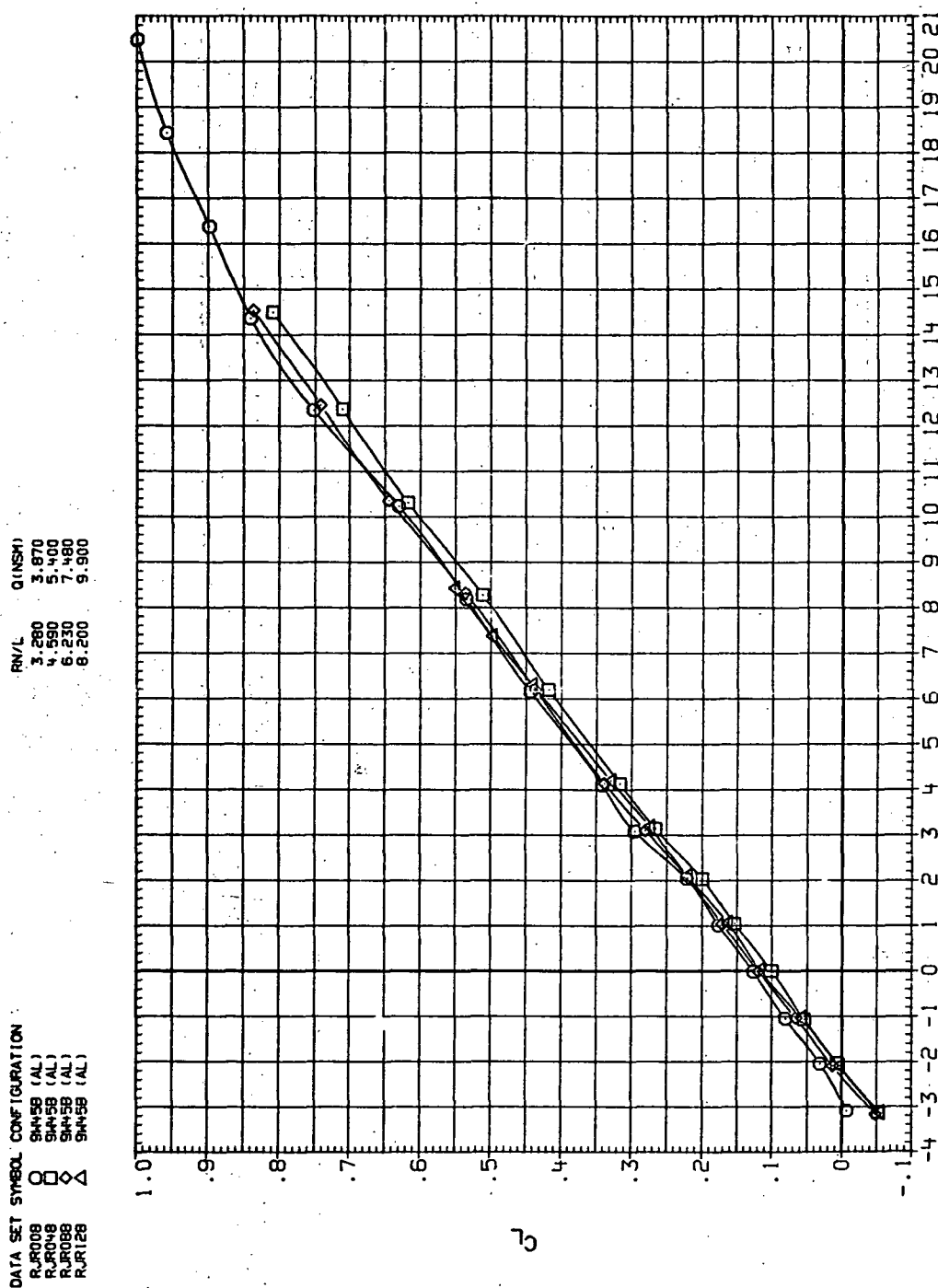
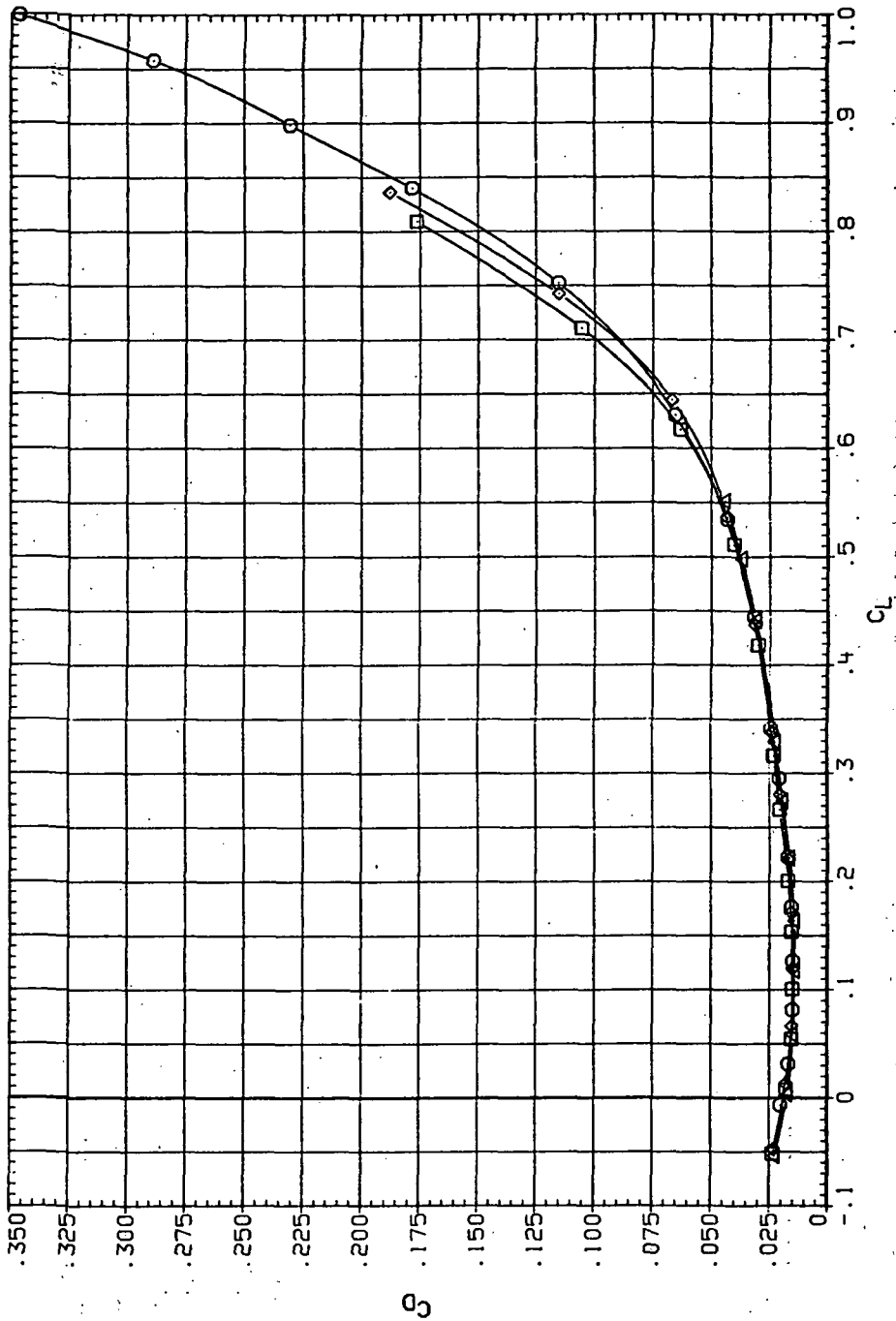
(a) C_L vs α .

Figure 8.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.4$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR008 ○ SHN58 (AL)
 RJR048 □ SHN58 (AL)
 RJR088 ◇ SHN58 (AL)
 RJR128 △ SHN58 (AL)

RV/L Q (NSM)
 3.260 3.670
 4.590 5.400
 6.230 7.480
 8.200 9.900

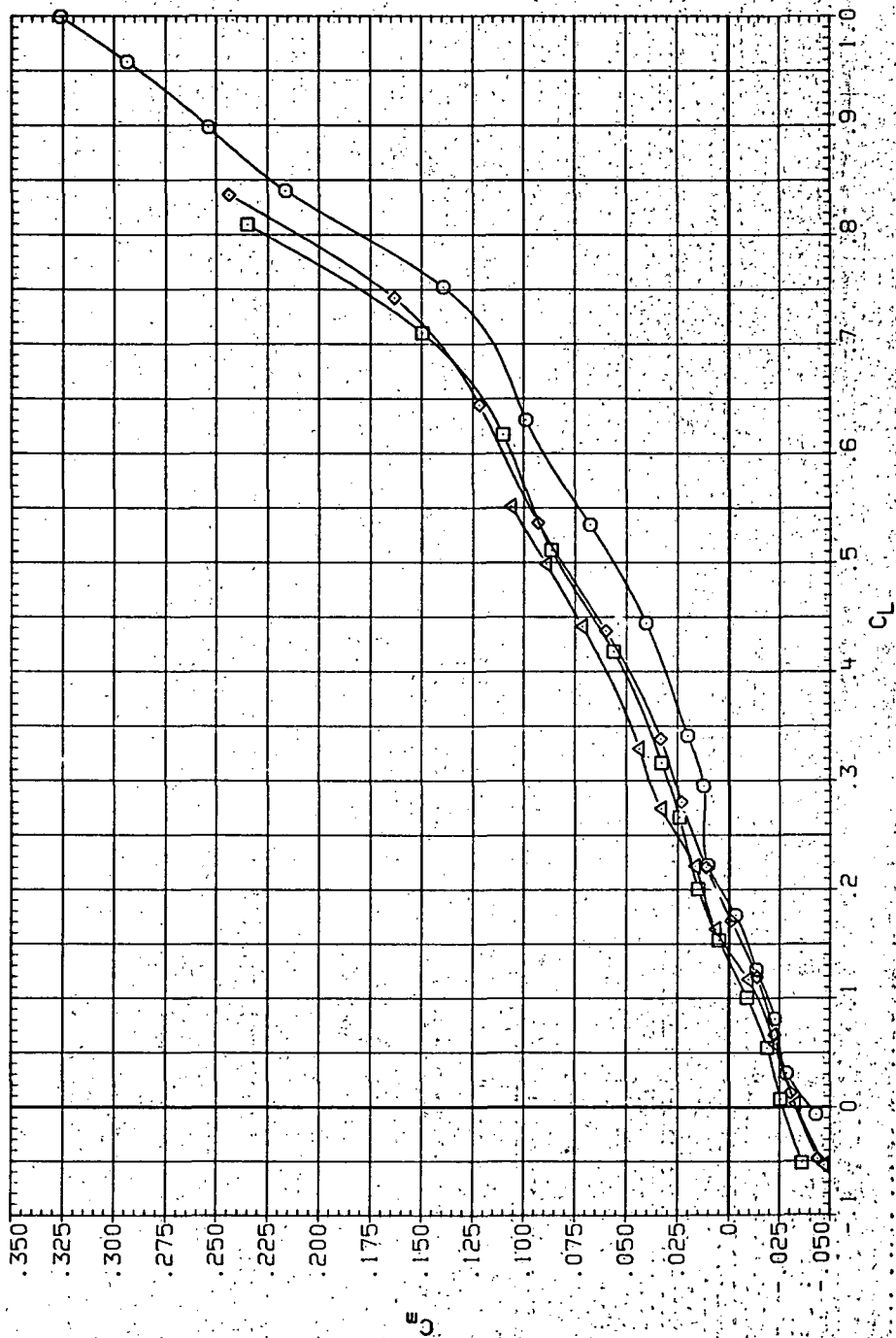


(b) C_D vs C_L

Figure 8.-- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR008 ○ 9M45B (AL)
 RJR048 □ 9M45B (AL)
 RJR088 ◇ 9M45B (AL)
 RJR128 △ 9M45B (AL)

RN/L Q(NSH)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

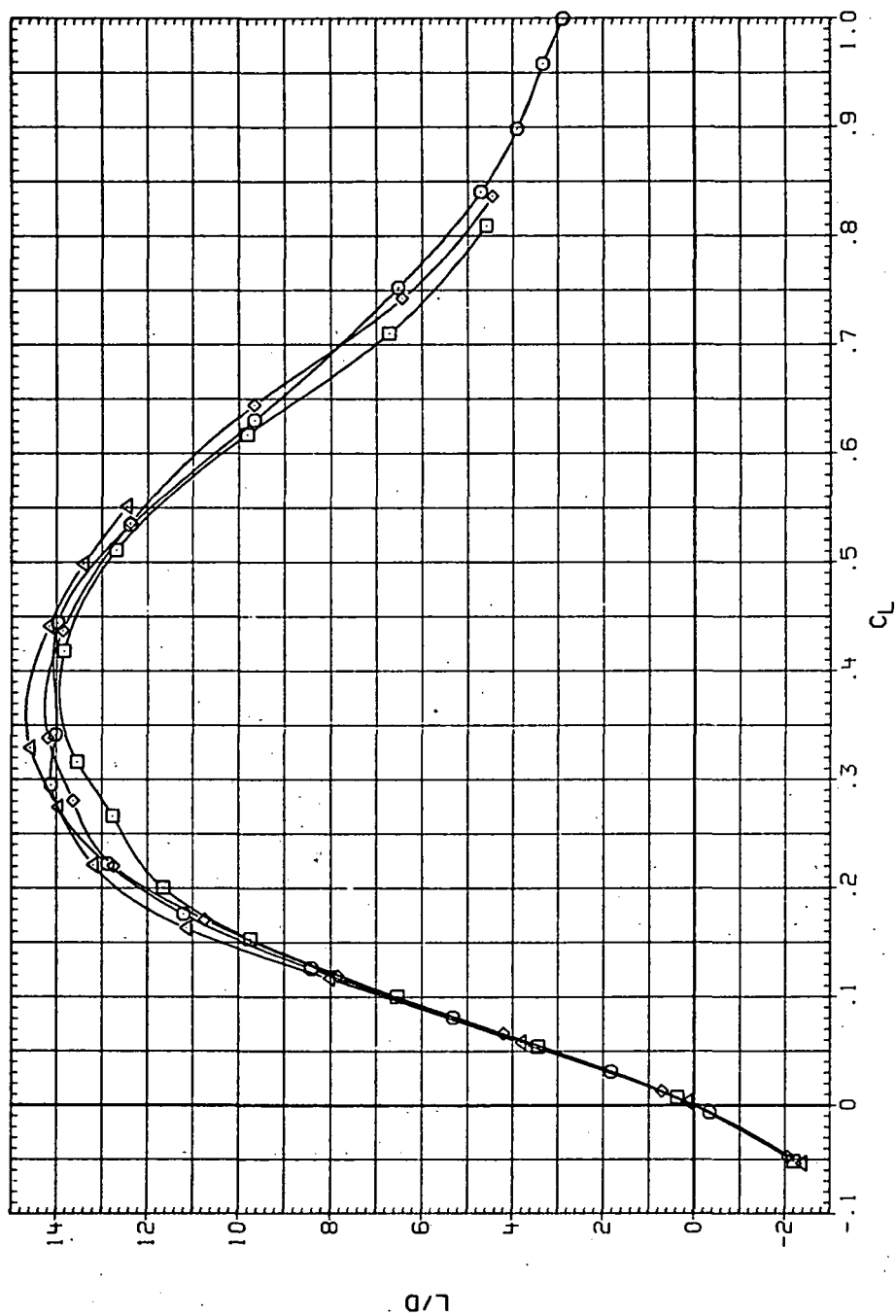


(c) C_m vs C_L

Figure 8.— Continued.

RV/L	Q(NSH)
3.280	3.870
4.590	5.400
6.230	7.480
8.200	9.900

DATA SET	SYMBOL	CONFIGURATION
RJR008	○	9M458 (AL)
RJR048	□	9M458 (AL)
RJR088	◇	9M458 (AL)
RJR128	△	9M458 (AL)



(d) L/D vs C_L .

Figure 8.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR008 $\square$ SHW58 (AL)
 RJR048 $\diamond$ SHW58 (AL)
 RJR088 $\triangle$ SHW58 (AL)
 RJR128 $\square$ SHW58 (AL)

RV/L Q (NSM)

3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

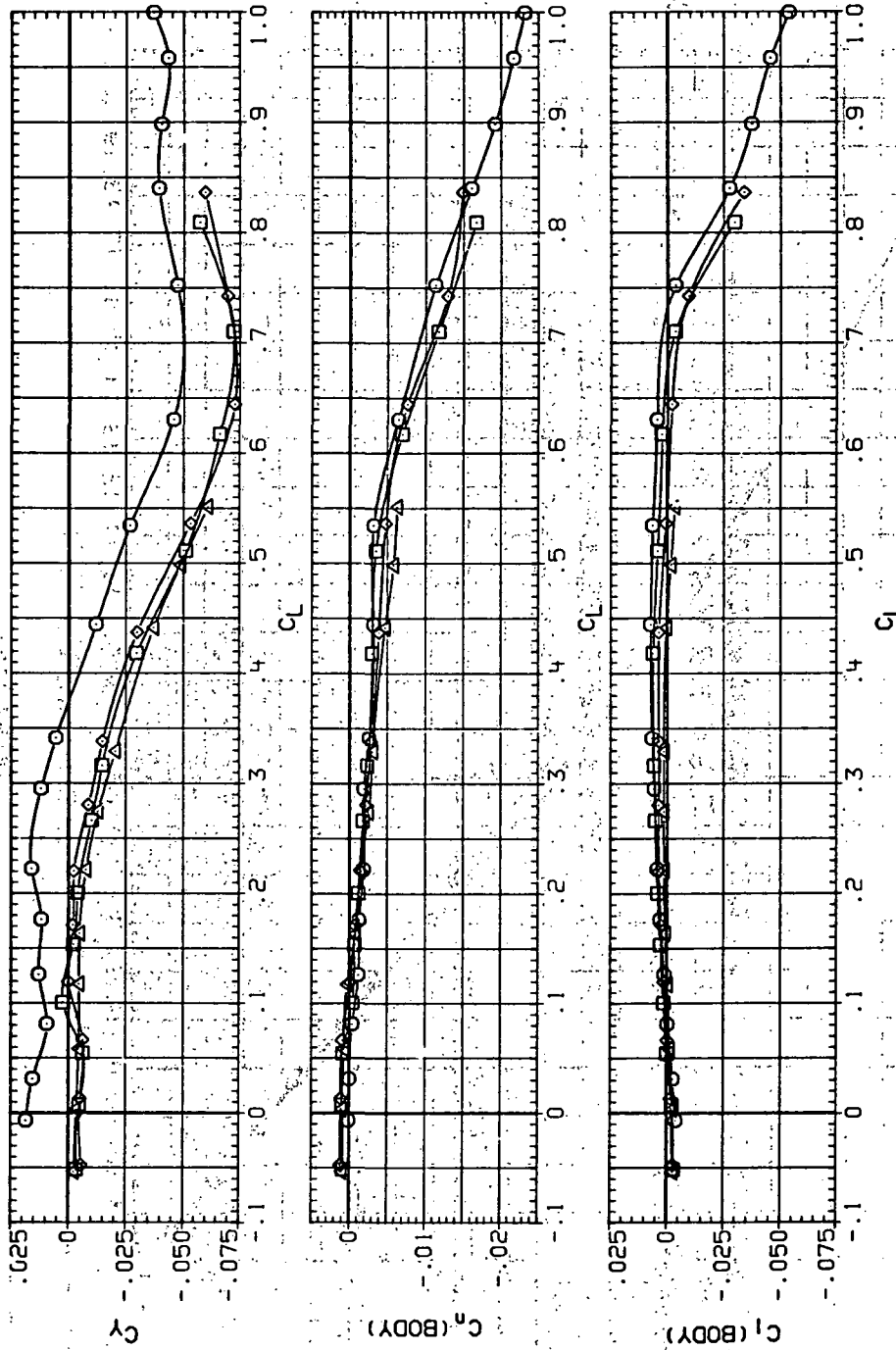
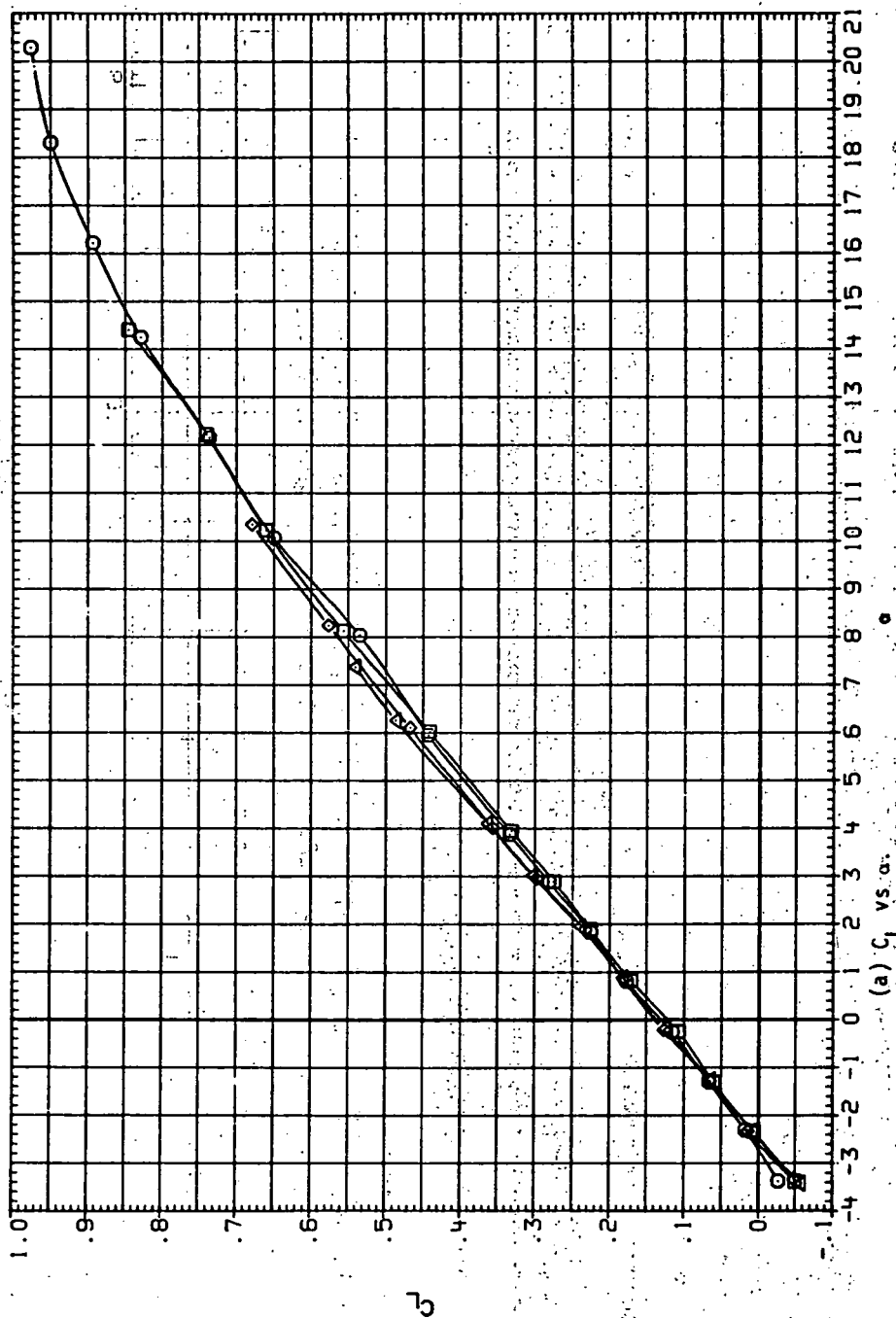
(e) C_Y , C_n and C_l vs C_L .

Figure 8. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR009 $\square$ 9A458 (AL)
 RJR049 $\square$ 9A458 (AL)
 RJR089 $\square$ 9A458 (AL)
 RJR129 $\square$ 9A458 (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

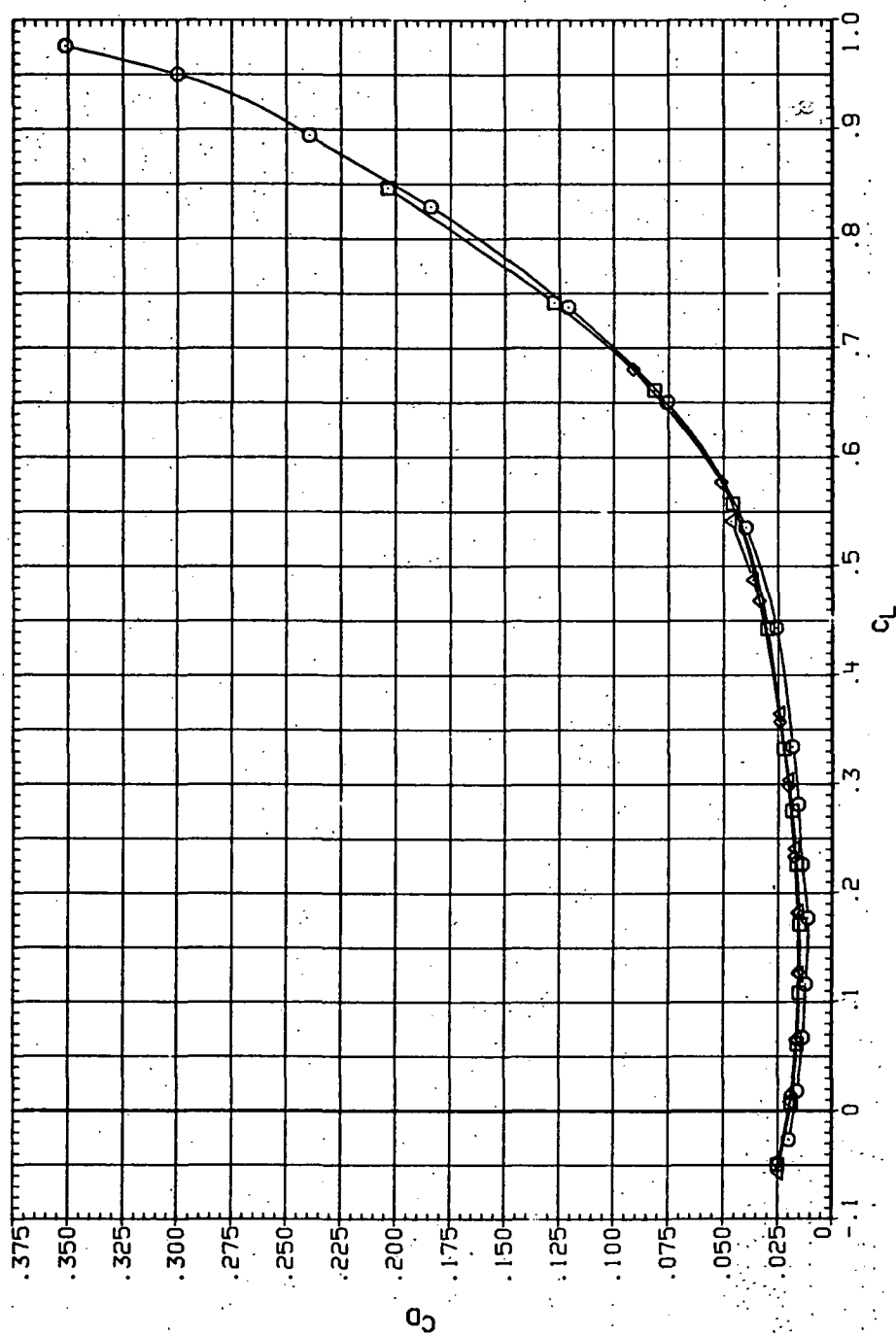


(a) C_L vs α .

Figure 9.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR009 $\square$ 9A+58 (AL)
 RJR049 $\square$ 9A+58 (AL)
 RJR089 $\diamond$ 9A+58 (AL)
 RJR129 $\triangle$ 9A+58 (AL)

RN/L Q (INSH)
 3.260 5.610
 4.580 7.710
 6.230 10.600
 8.200 14.100

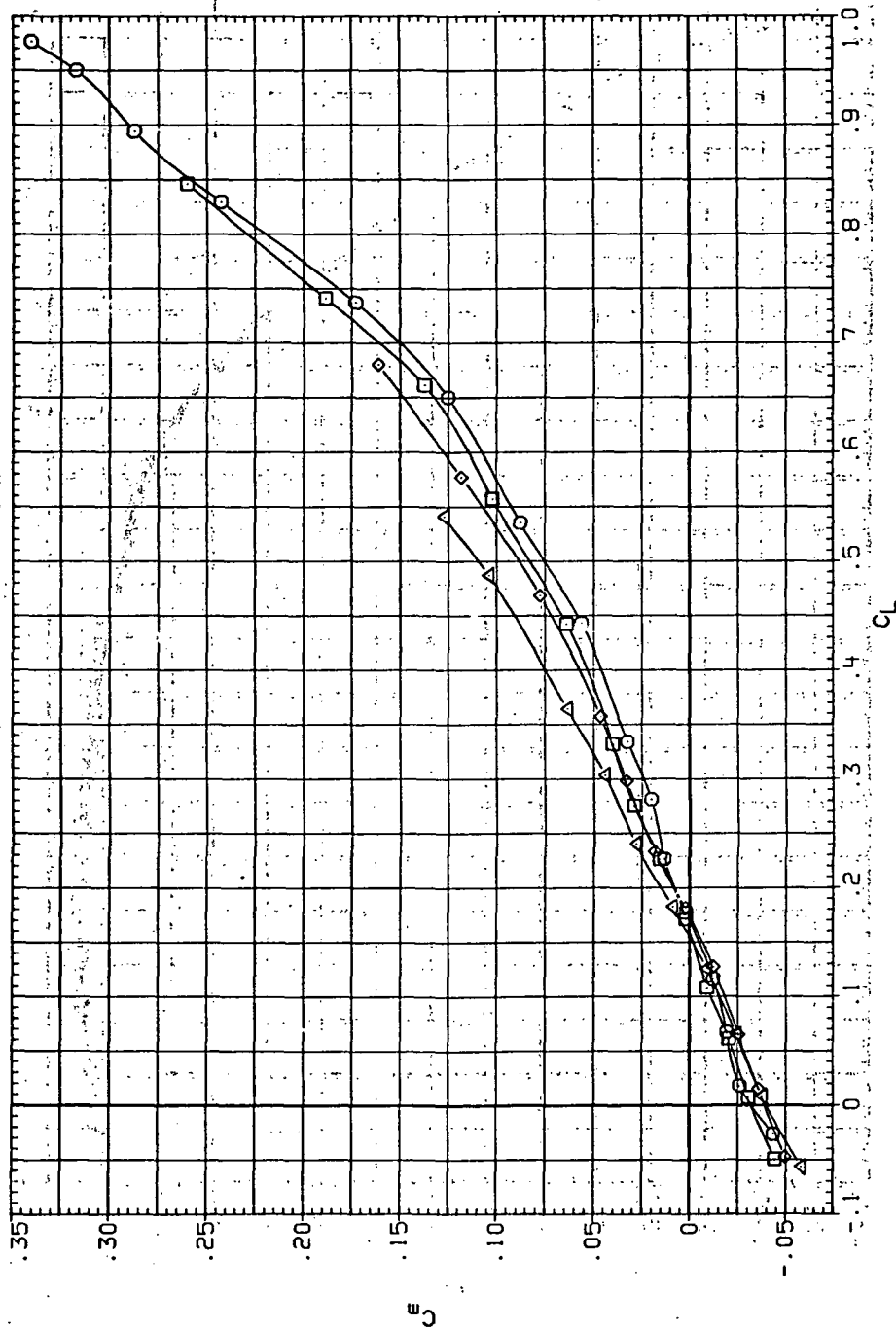


(b) C_D vs C_L .

Figure 9. - Continued.

DATA SET SYMBOL CONFIGURATION
 RUR009 $\square$ SH45B (AL)
 RUR019 $\square$ SH45B (AL)
 RUR088 $\square$ SH45B (AL)
 RUR129 $\triangle$ SH45B (AL)

RN/L Q(NSM)
 3.280 5.610
 4.550 7.710
 6.230 10.600
 8.200 14.100

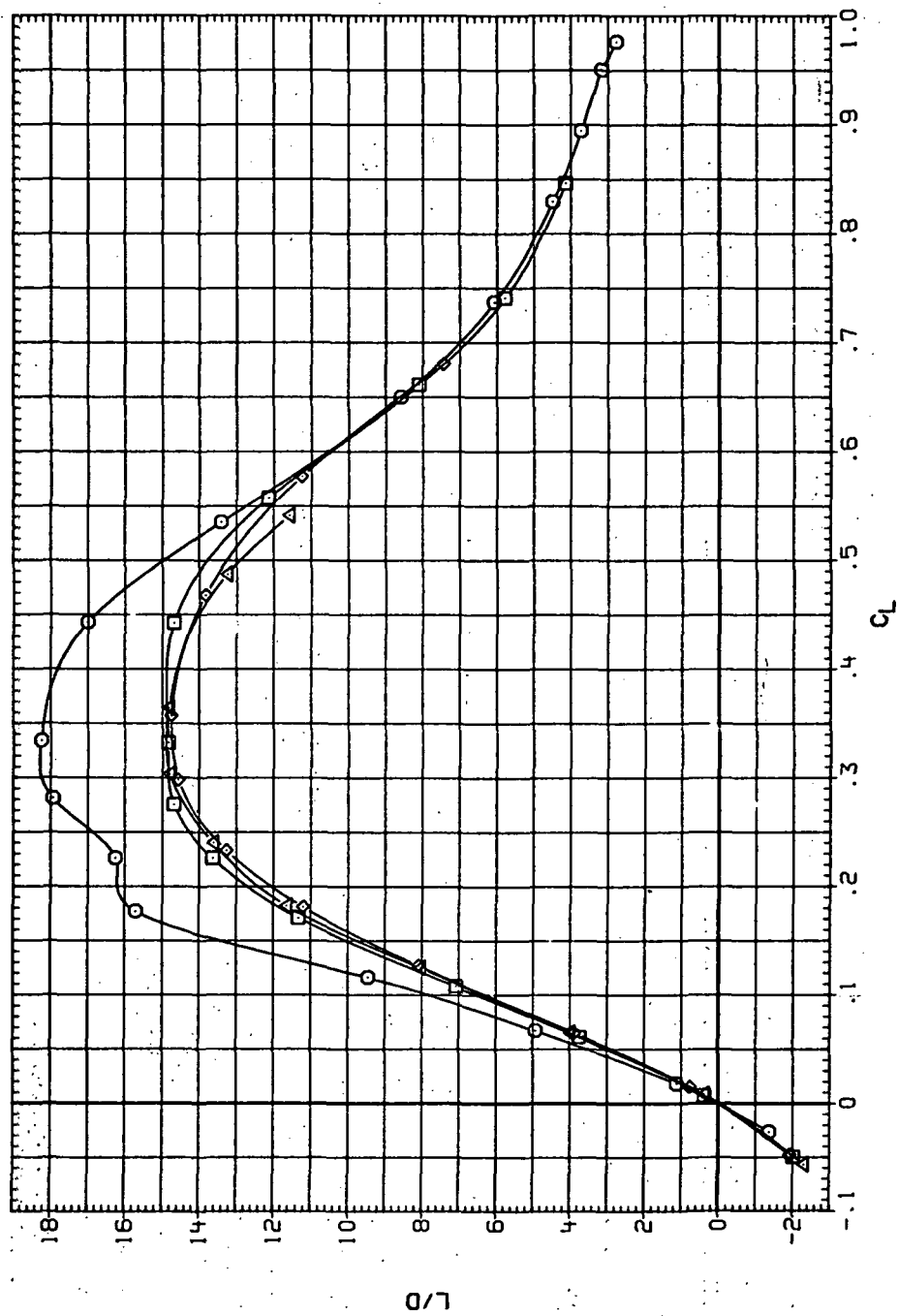


(c) ϵ_c vs C_L

Figure 9.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR009 $\square$ 94W58 (AL)
 RJR049 $\square$ 94W58 (AL)
 RJR089 $\diamond$ 94W58 (AL)
 RJR129 $\triangle$ 94W58 (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

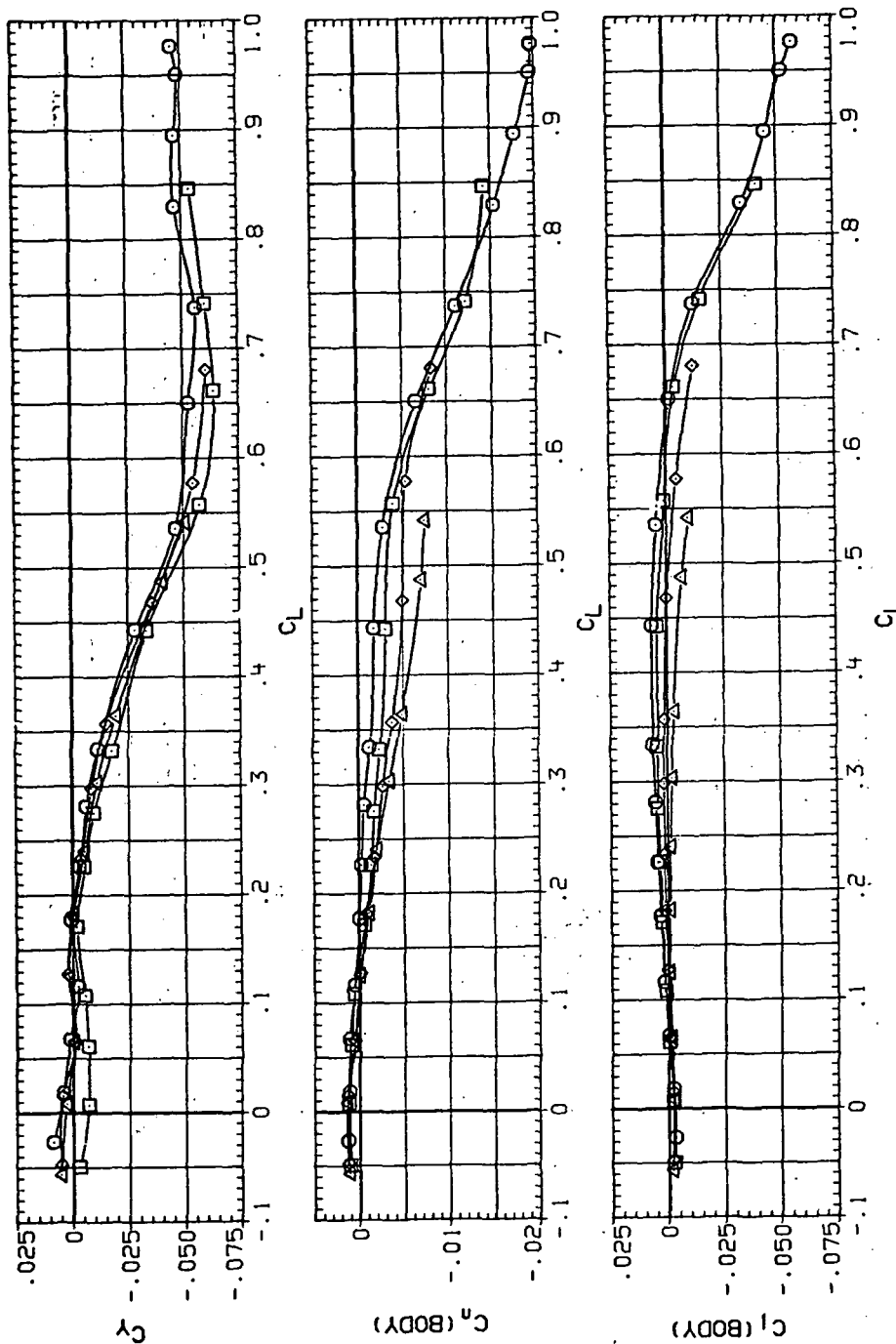


(d) L/D vs C_L .

Figure 9. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR009 5W5B (AL)
 RJR019 5W5B (AL)
 RJR089 5W5B (AL)
 RJR129 5W5B (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

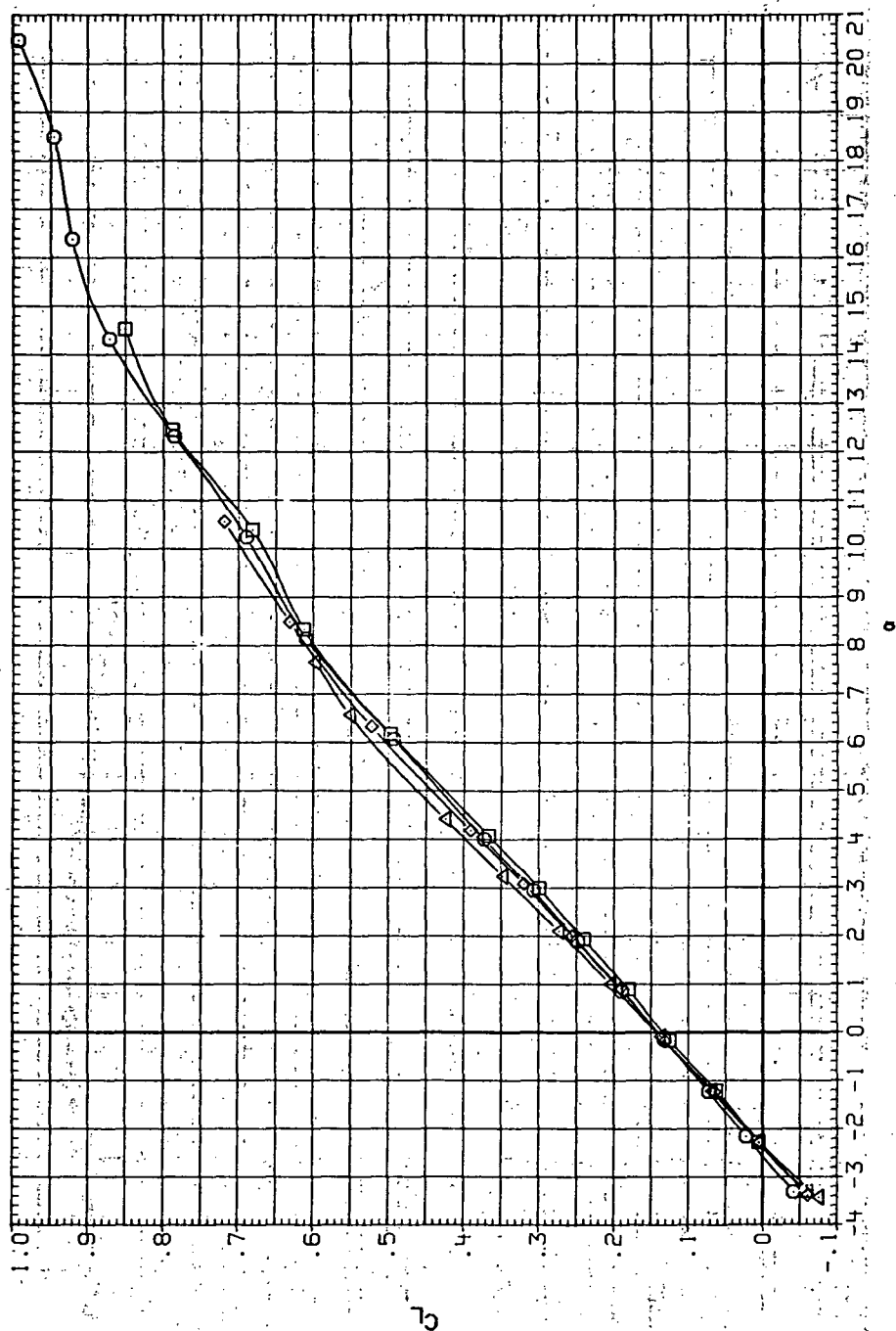


(e) C_Y , C_n and C_l vs C_L .

Figure 9. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RUR010 $\square$ 5H45B (AL)
 RUR050 $\square$ 5H45B (AL)
 RUR090 $\square$ 5H45B (AL)
 RUR130 $\square$ 5H45B (AL)

RN/L Q (NSM)
 3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800

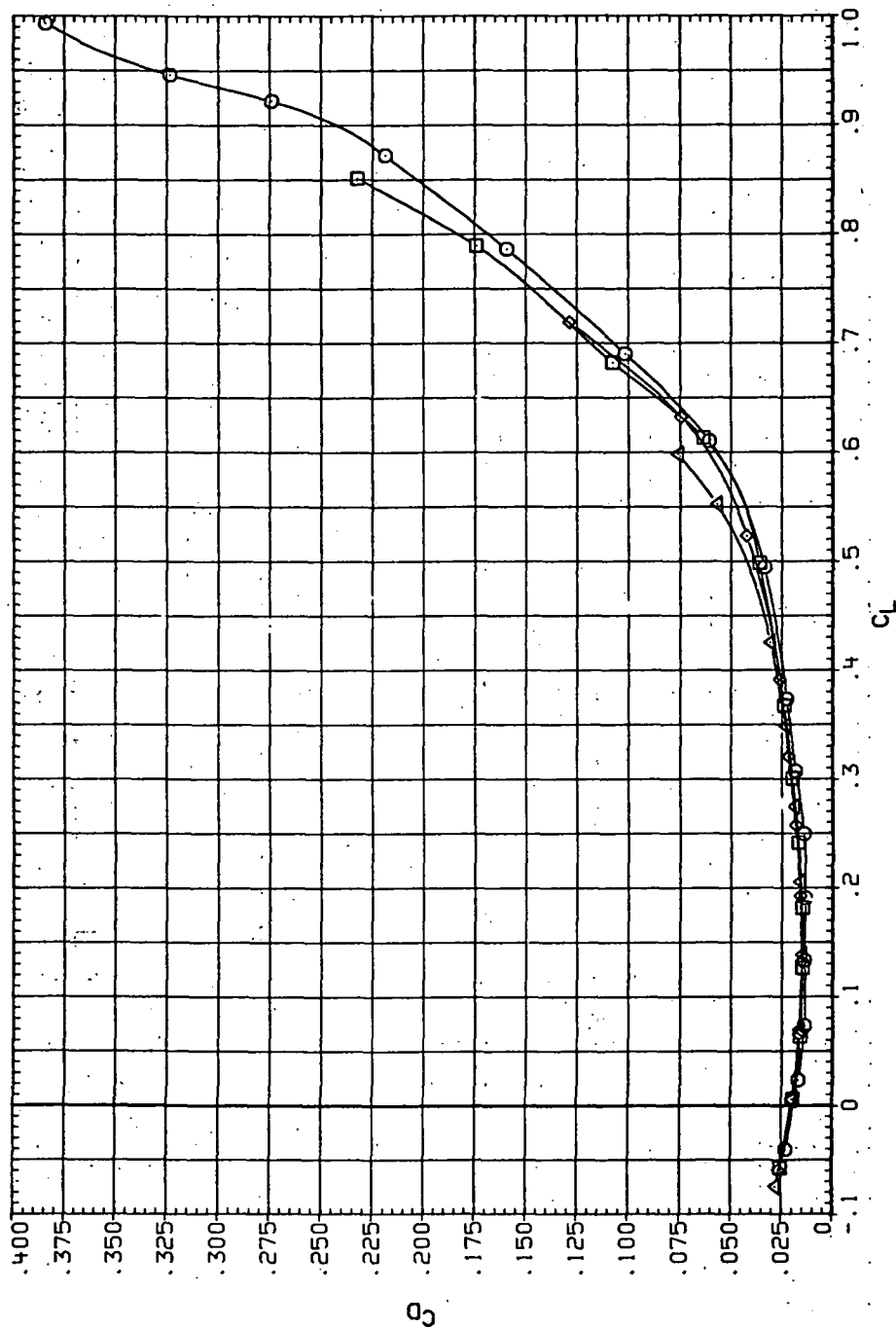


(a) C_L vs α .

Figure 10.— Dynamic-pressure effects on the aerodynamics characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.8$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR010 ○
 RJR050 □
 RJR090 ◇
 RJR130 △

RN/L Q(NSH)
 3.280 7.050
 3.590 9.750
 6.530 13.400
 8.200 17.800

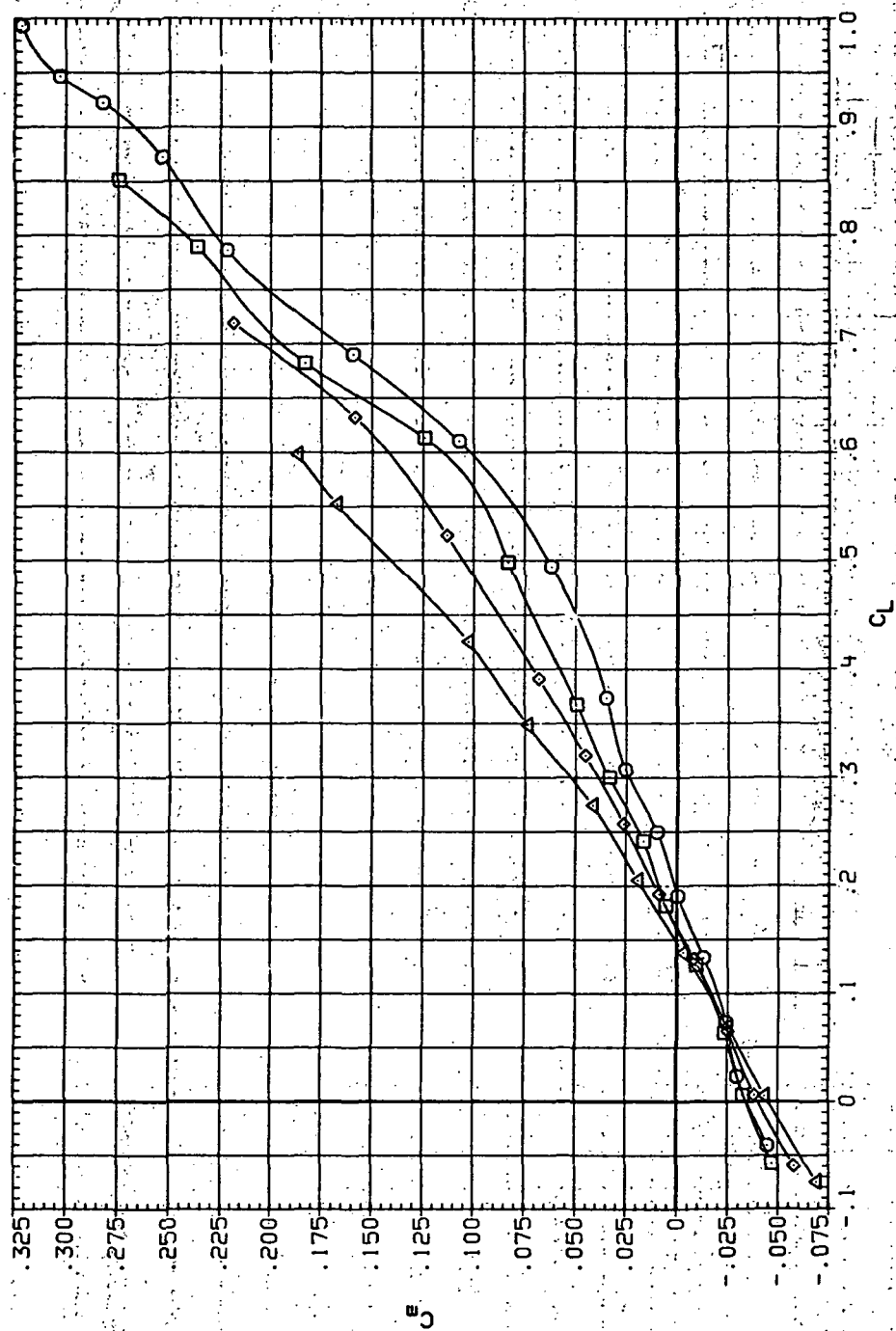


(b) C_D vs C_L .

Figure 10.— Continued.

DATA SET SYMBOL CONFIGURATION
 R0010 ○ 94458 (AL)
 R0050 □ 94458 (AL)
 R0090 ◇ 94458 (AL)
 R0130 △ 94458 (AL)

RM/L Q(NSH)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800



(c) C_m vs C_L .

Figure 10.—Continued.

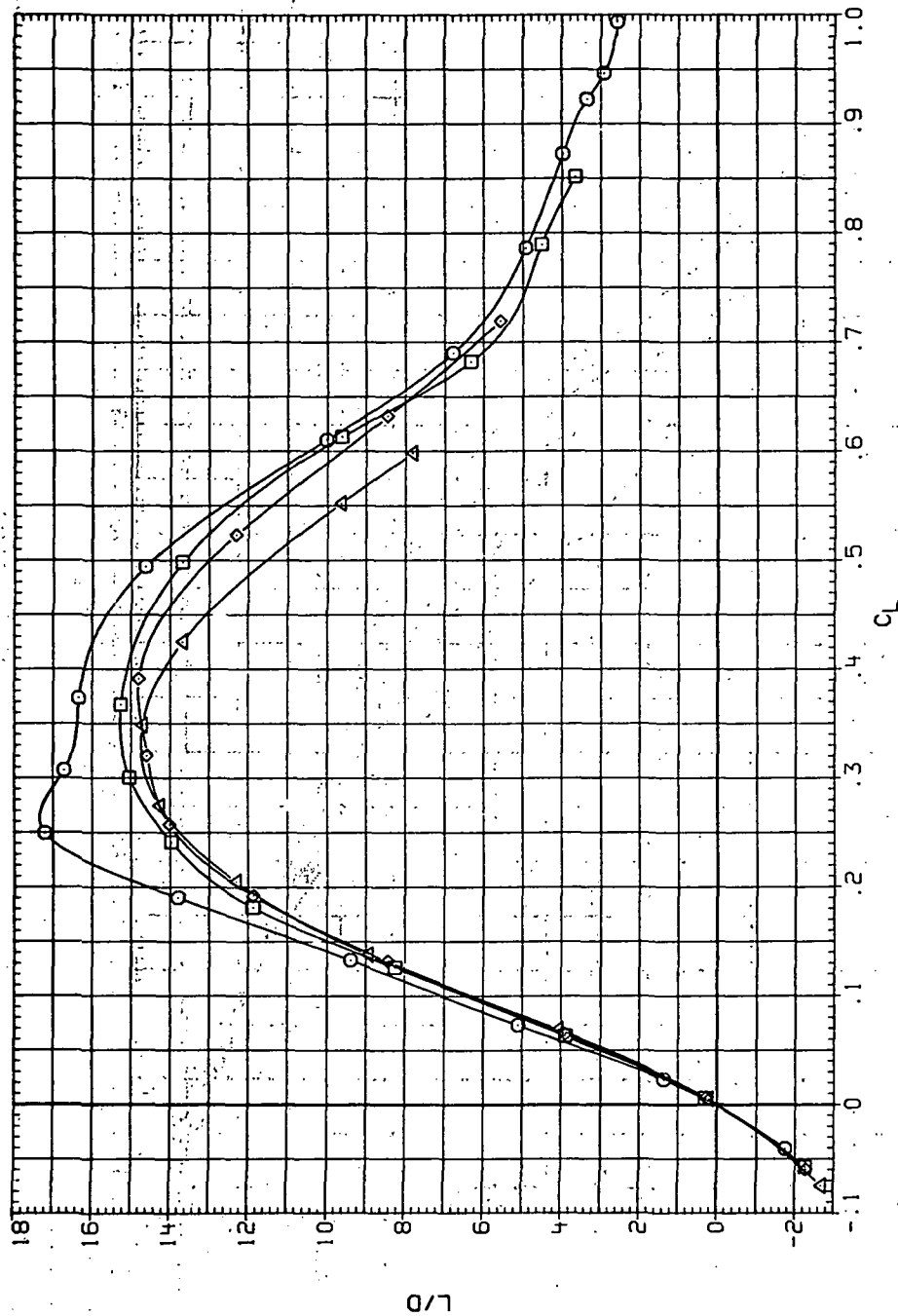
DATA SET SYMBOL CONFIGURATION

RJ010
RJ050
RJ050
RJ130

9A45B (AL)
9A45B (AL)
9A45B (AL)
9A45B (AL)

□
◇
△

RN/L Q(NSH)
3.280 7.060
4.590 9.720
6.230 13.400
8.200 17.800



(d) L/D vs C_L

Figure 10.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR010 $\square$ SH4SB (AL)
 RJR050 $\square$ SH4SB (AL)
 RJR090 $\diamond$ SH4SB (AL)
 RJR130 $\triangle$ SH4SB (AL)

RN/L Q(NSM)
 3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800

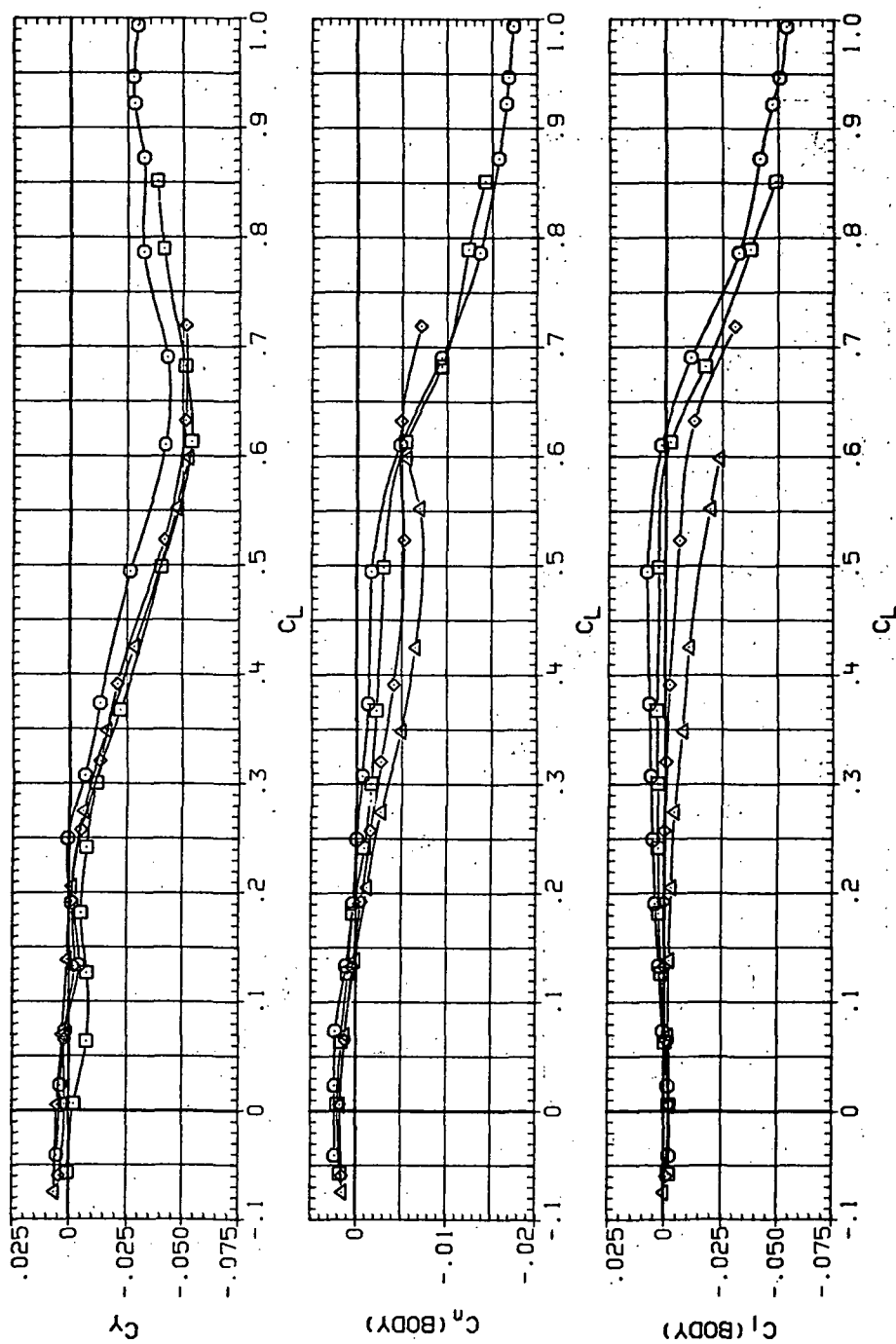
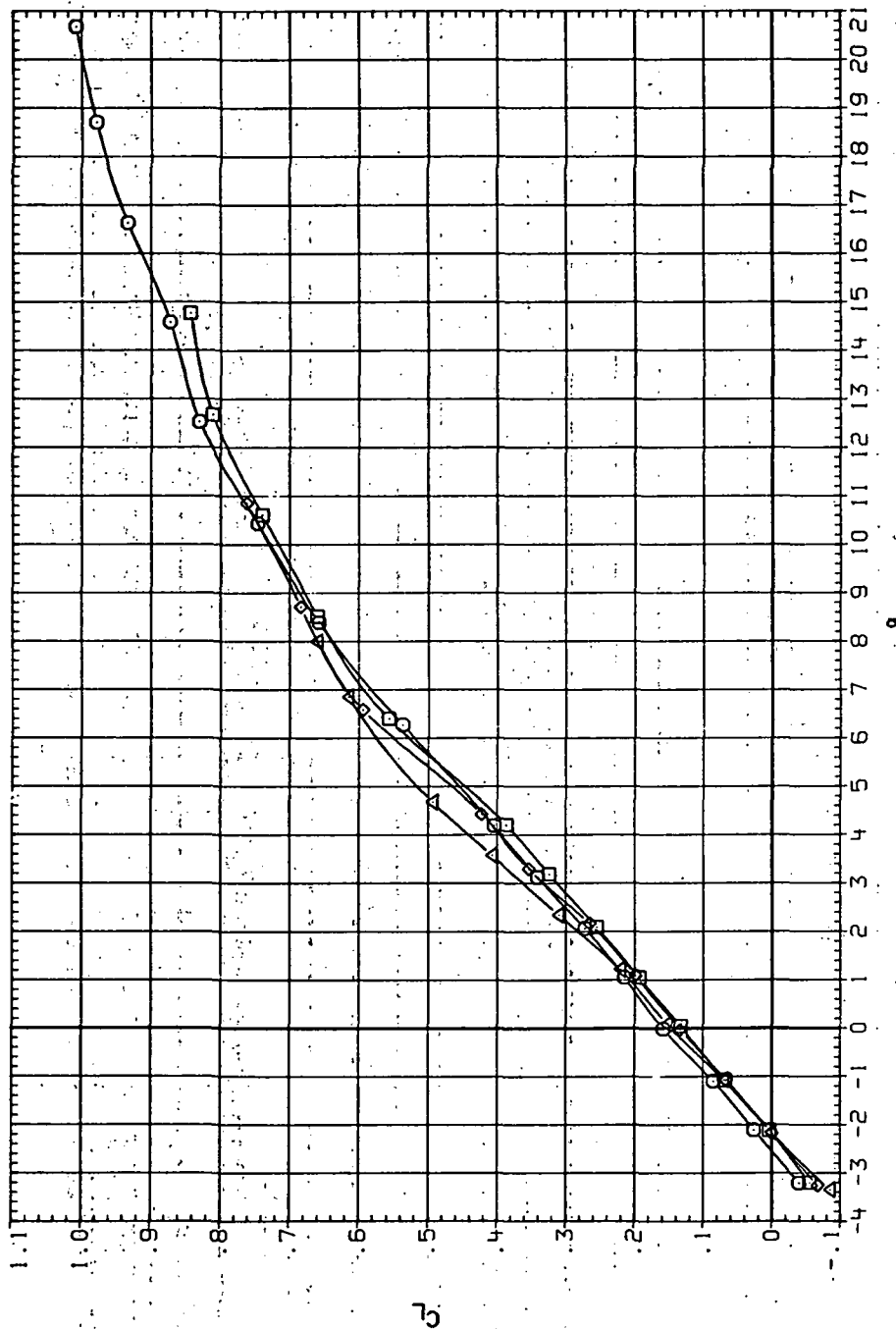
(e) C_Y , C_N and C_L and C_L .

Figure 10.— Concluded.

DATA SET SYMBOL CONFIGURATION

RJR011 9445B (AL)
 RJR051 9445B (AL)
 RJR091 9445B (AL)
 RJR131 9445B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

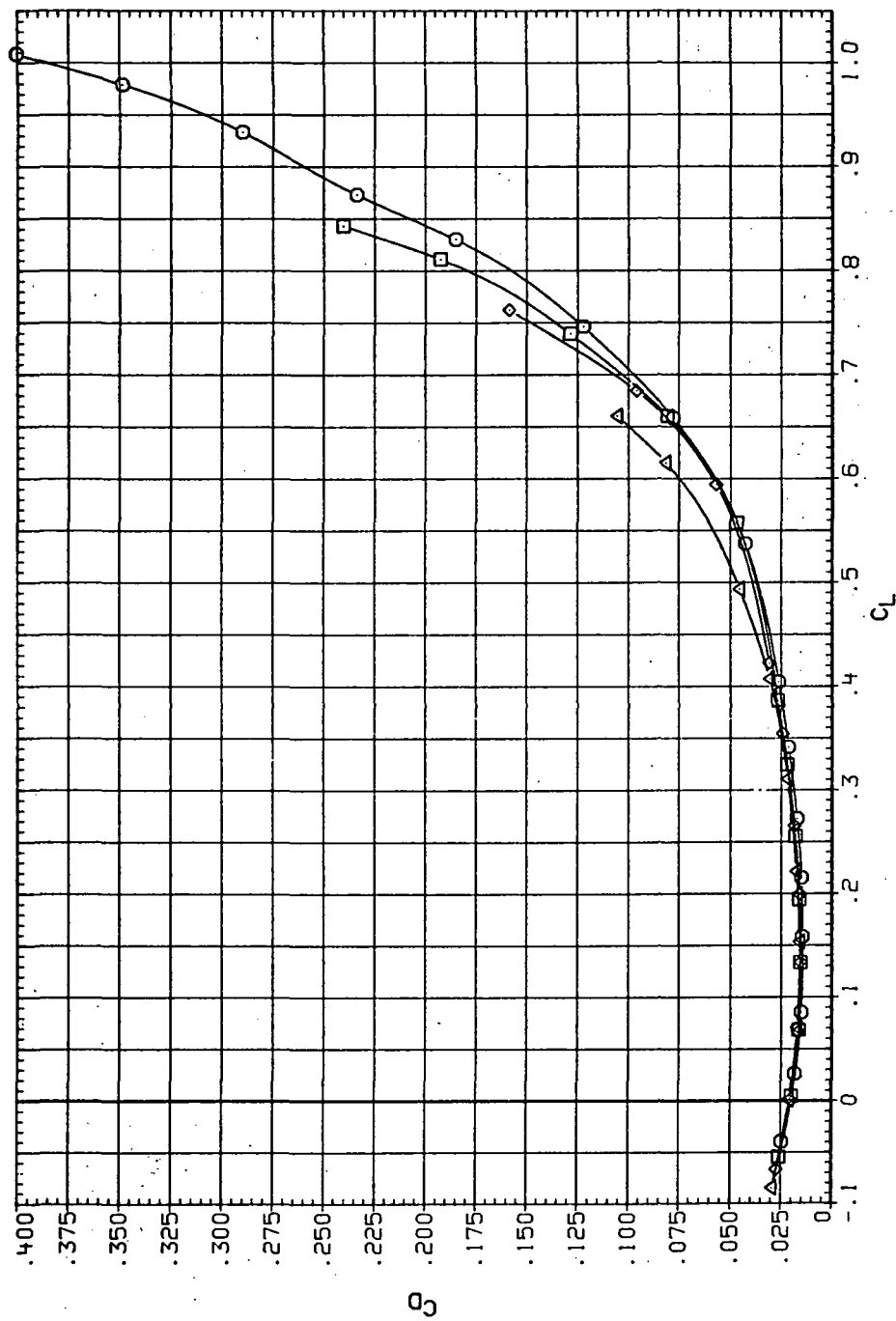


(a) C_L vs α .

Figure 11.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.9$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR011 ○ SHW5B (AL)
 RJR051 □ SHW5B (AL)
 RJR091 △ SHW5B (AL)
 RJR131 ◇ SHW5B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.350 10.500
 6.230 14.500
 8.200 19.200

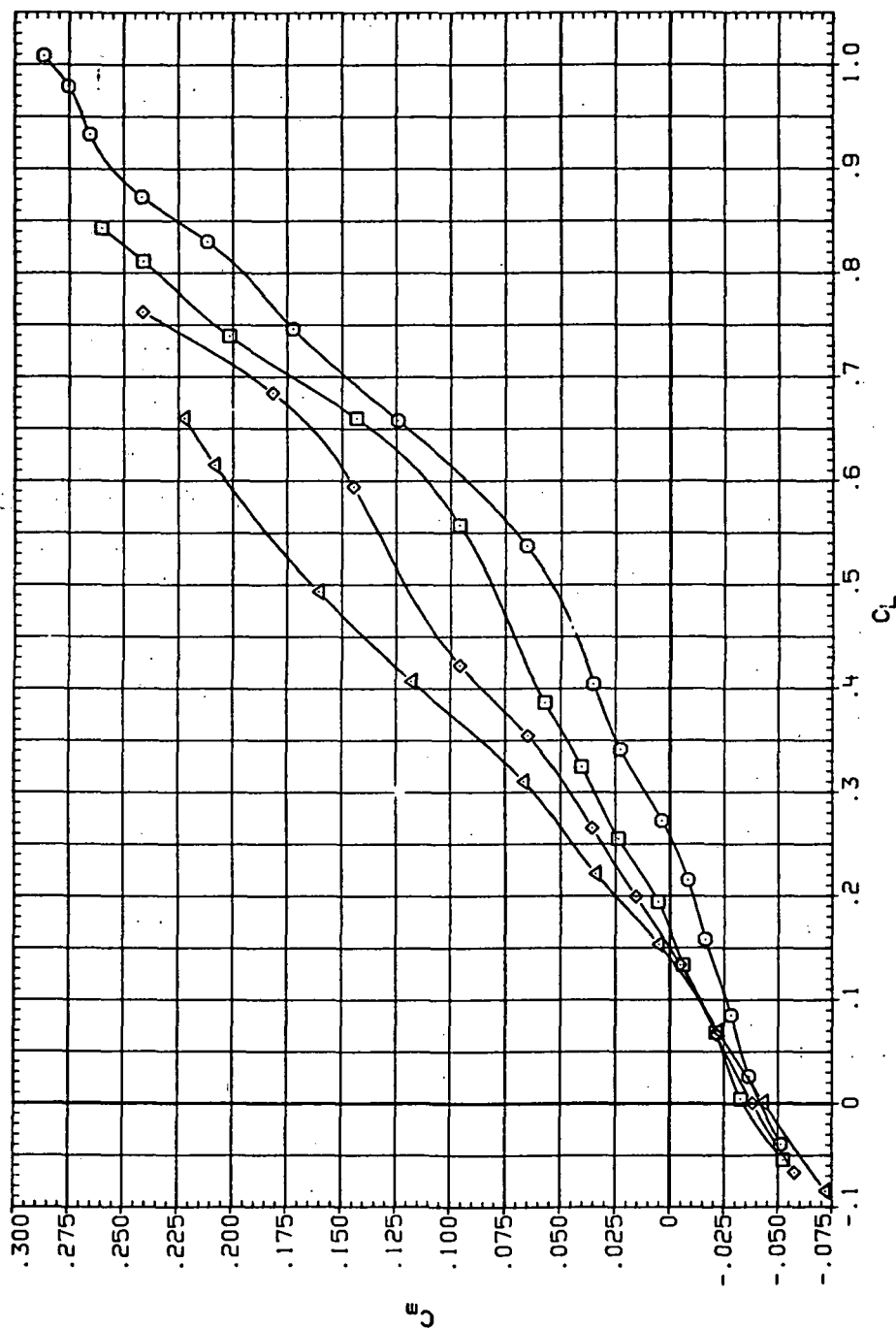


(b) C_D vs C_L .

Figure 11.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR011 ○ 9A45B (AL)
 RJR051 □ 9A45B (AL)
 RJR091 ◇ 9A45B (AL)
 RJR131 △ 9A45B (AL)

RN/L L (INCH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

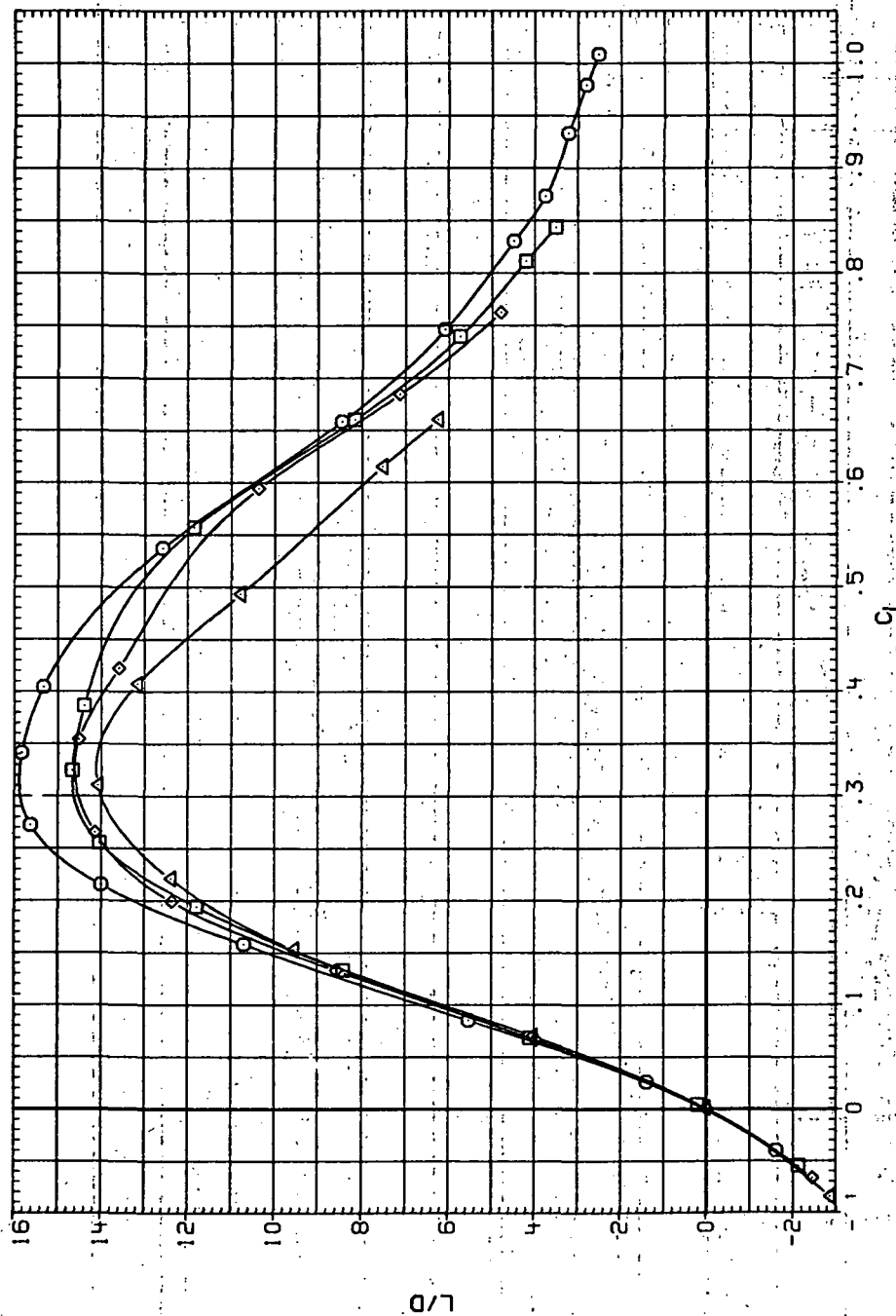


(c) C_m vs C_L .

Figure 11.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR011 $\square$ 94458 (AL)
 RJR051 $\square$ 94458 (AL)
 RJR091 $\diamond$ 94458 (AL)
 RJR131 $\triangle$ 94458 (AL)

RN/L Q (SH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

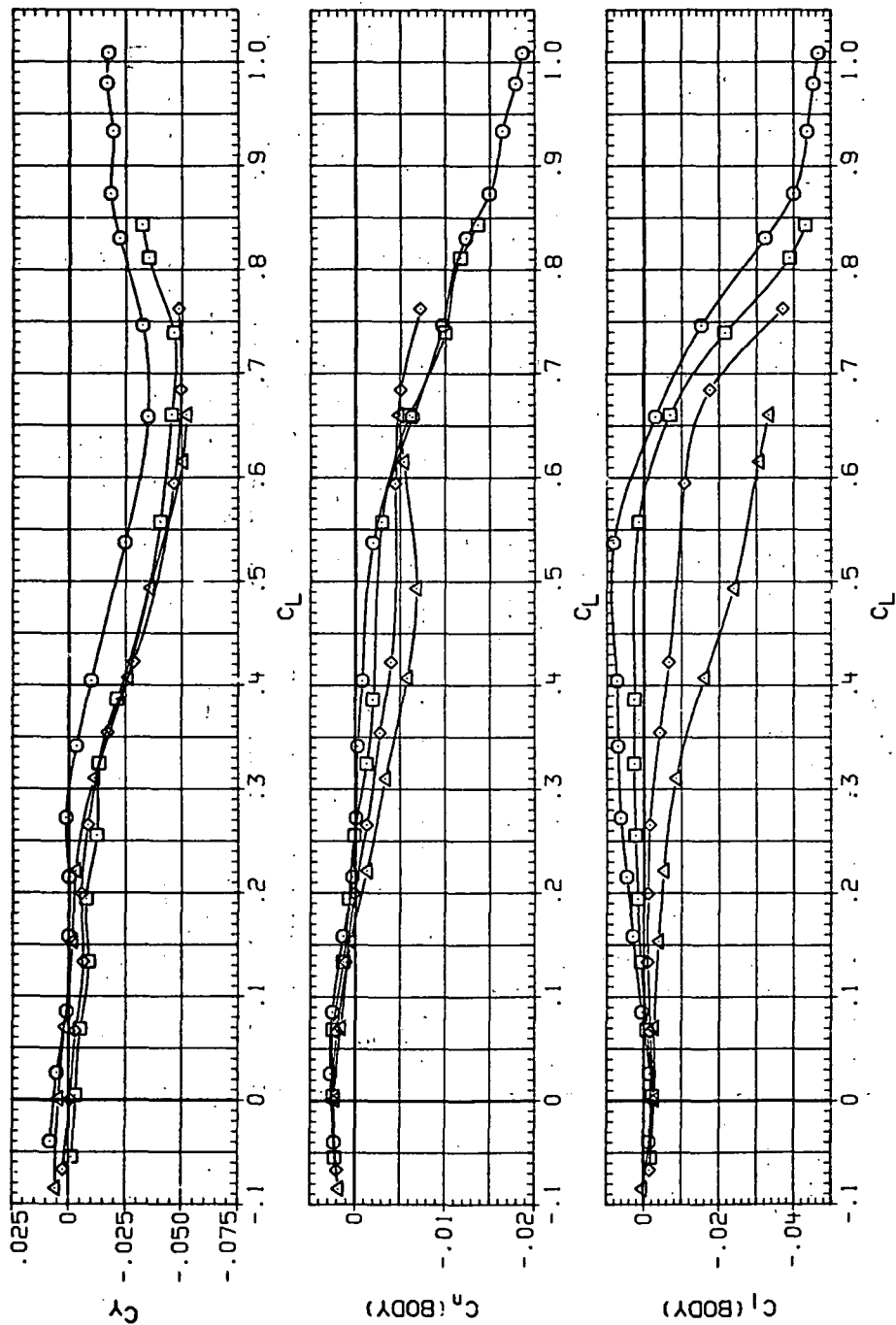


(d) L/D vs C_L .

Figure 11. - Continued.

DATA SET SYMBOL CONFIGURATION
 RUR011 ○ SH45B (AL)
 RUR051 □ SH45B (AL)
 RUR091 ◇ SH45B (AL)
 RUR131 △ SH45B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

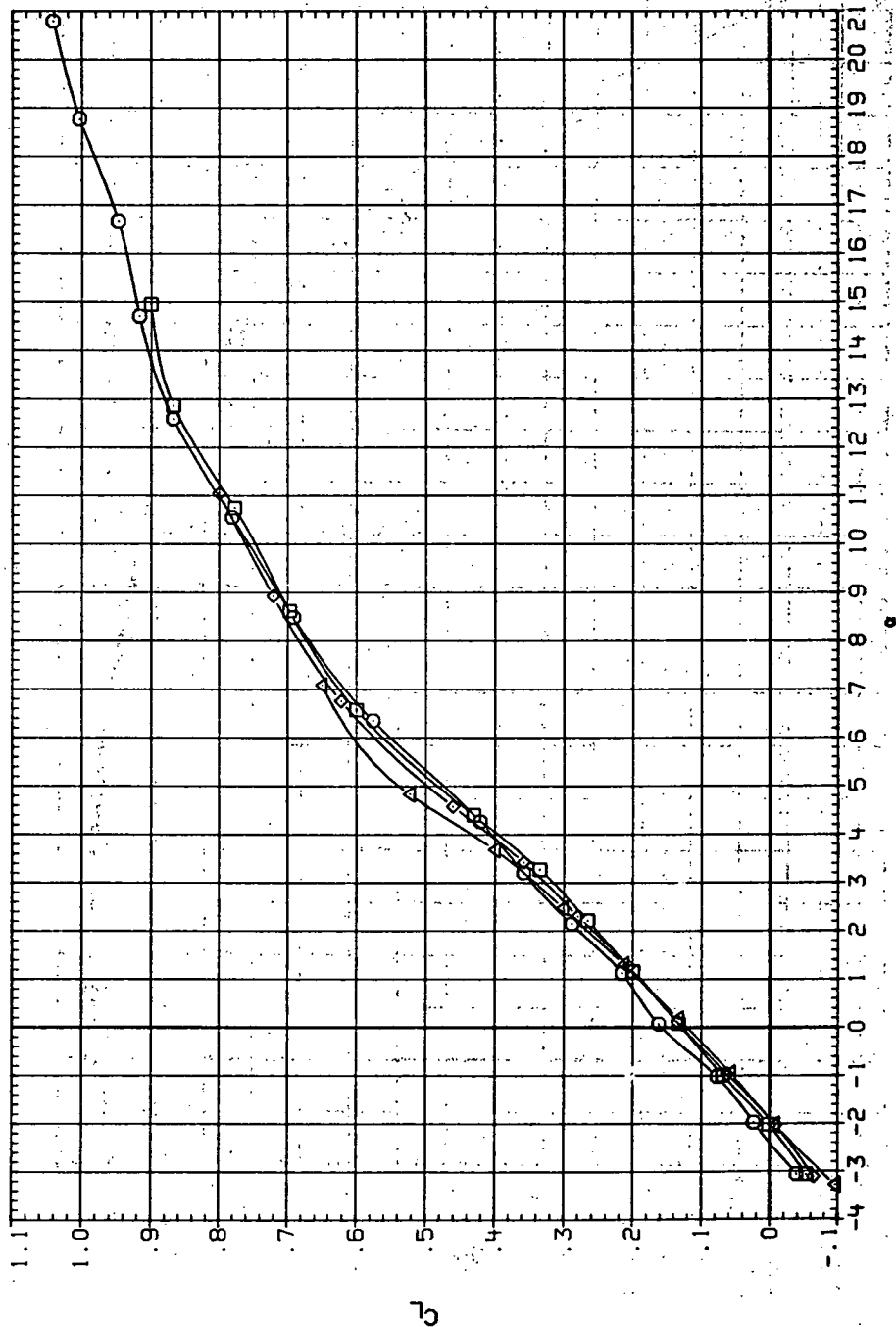


(e) C_Y , C_n and C_l vs C_L .

Figure 11.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR012 $\square$ SHW5B (AL)
 RJR052 $\square$ SHW5B (AL)
 RJR092 $\diamond$ SHW5B (AL)
 RJR132 $\triangle$ SHW5B (AL)

RN/L Q (NSM)
 3.280 7.950
 4.590 10.900
 6.230 15.000
 8.200 19.900

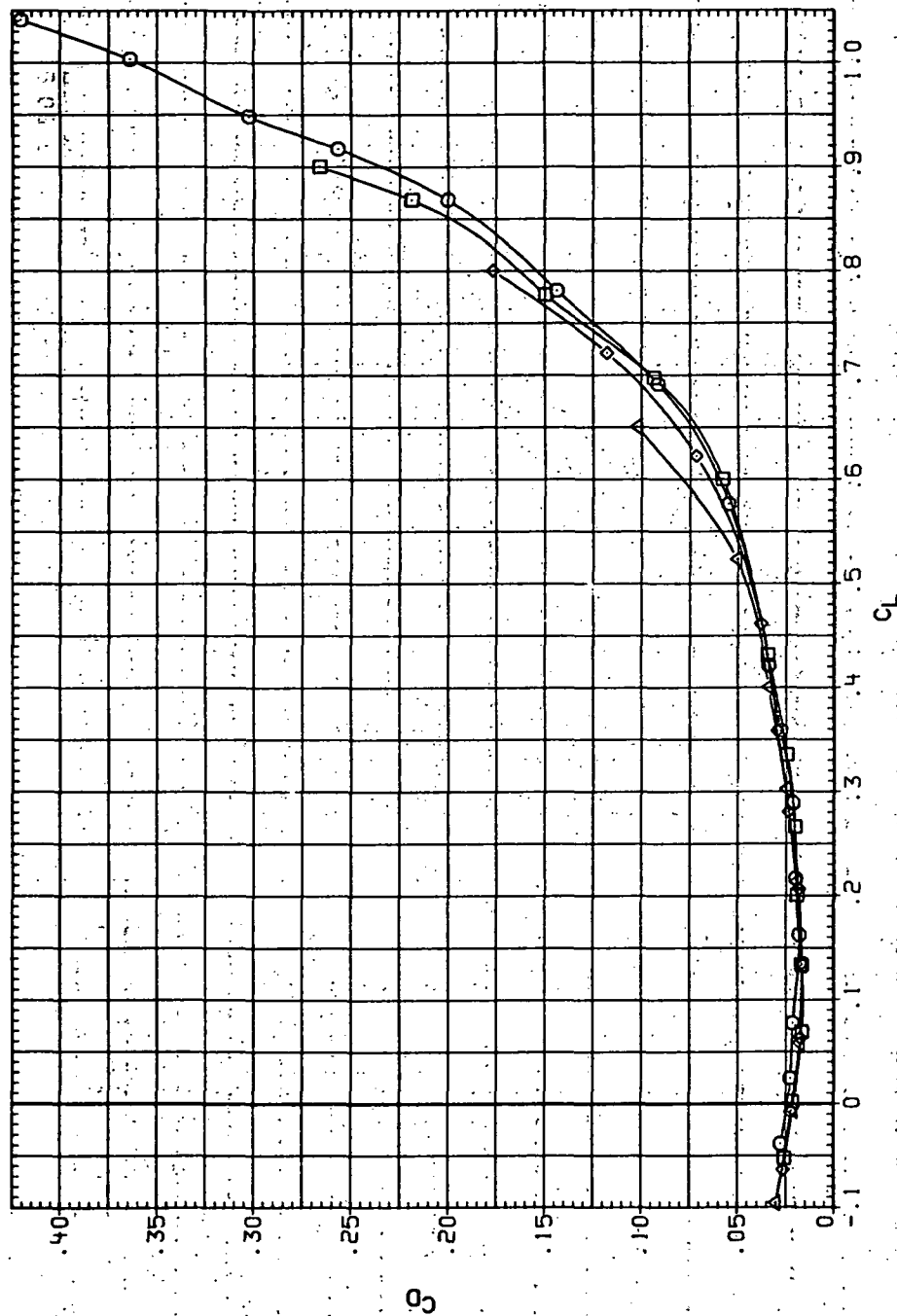


(a) C_L vs α

Figure 12.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.95$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RLR012 ○
 RLR052 □
 RLR092 △
 RLR132 ▲

RN/L Q(NSH)
 3.260 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

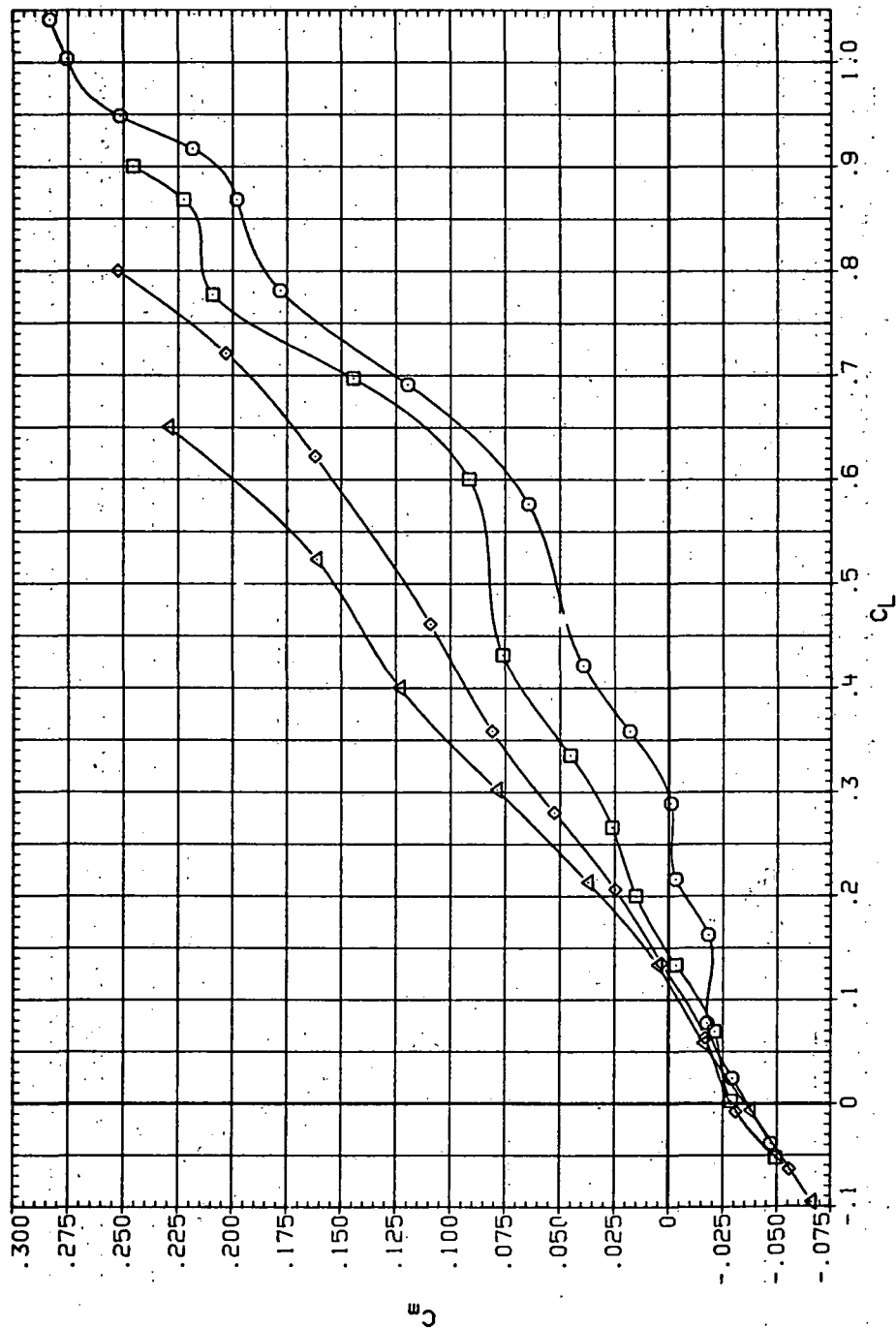


(b) C_D vs C_L

Figure 12.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR012 $\square$ 94458 (AL)
 RJR052 $\diamond$ 94458 (AL)
 RJR092 $\triangle$ 94458 (AL)
 RJR132 $\square$ 94458 (AL)

RM/L Q(NSM)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

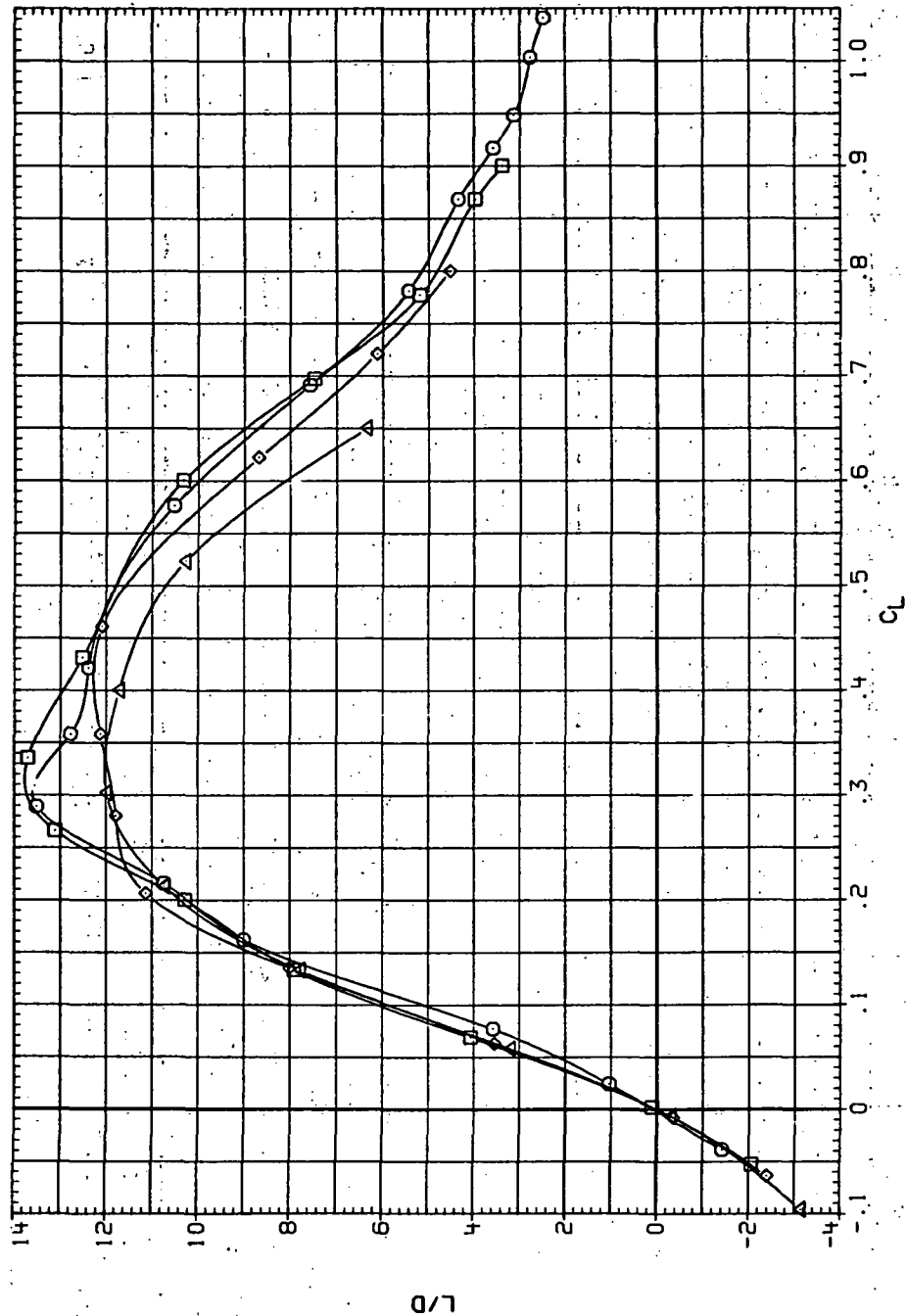


(c) C_m vs C_L

Figure 12.- Continued.

DATA SET SYMBOL CONFIGURATION
 RUP012 9H45B (AL)
 RUP052 9H45B (AL)
 RUP092 9H45B (AL)
 RUP132 9H45B (AL)

RN/L Q(1:3H)
 3.250 7.560
 4.250 10.900
 6.250 15.000
 8.200 19.900

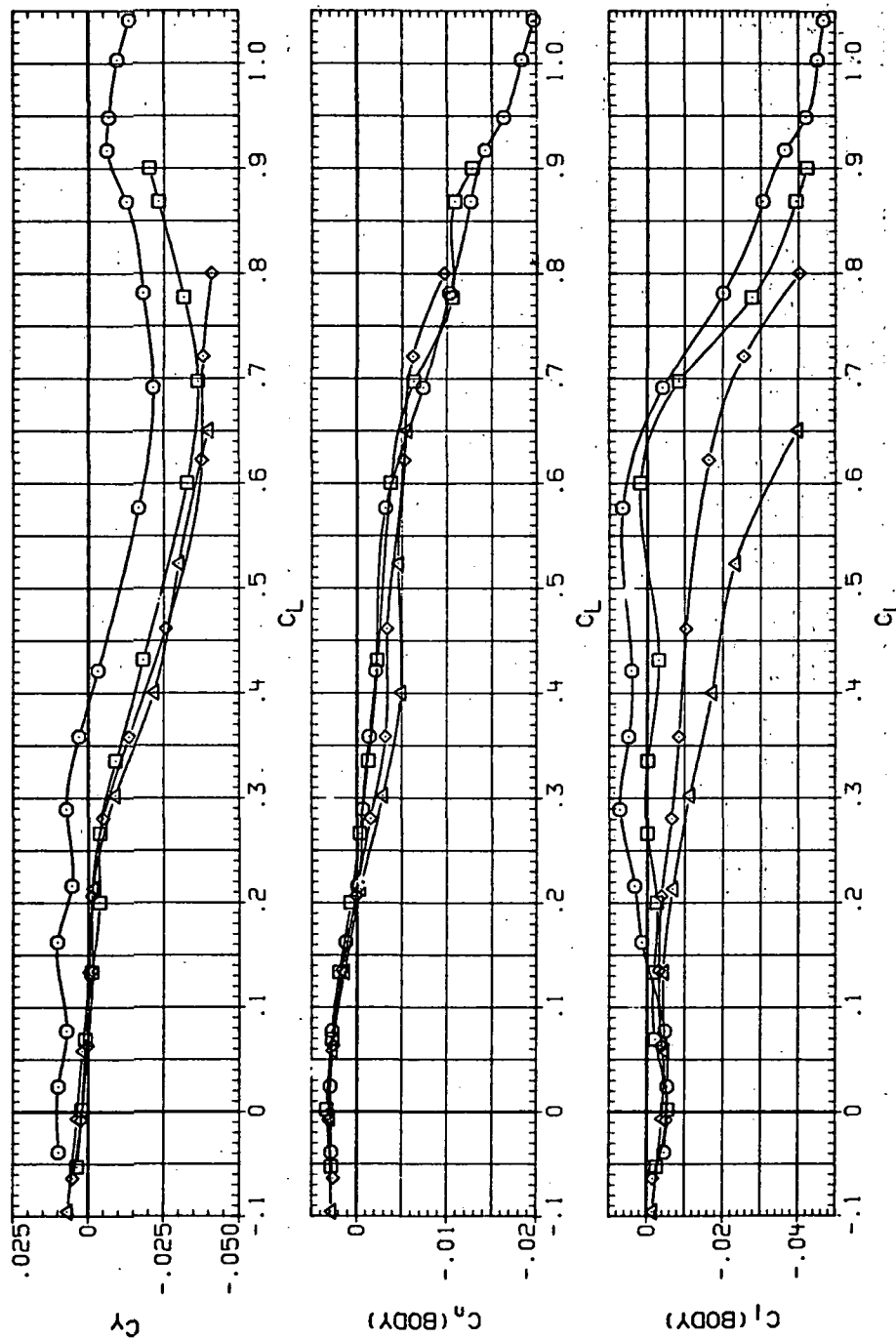


(d) L/D vs C_L

Figure 12. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR012 94N58 (AL)
 RJR052 94N58 (AL)
 RJR092 94N58 (AL)
 RJR132 94N58 (AL)

RN/L Q(NSH)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

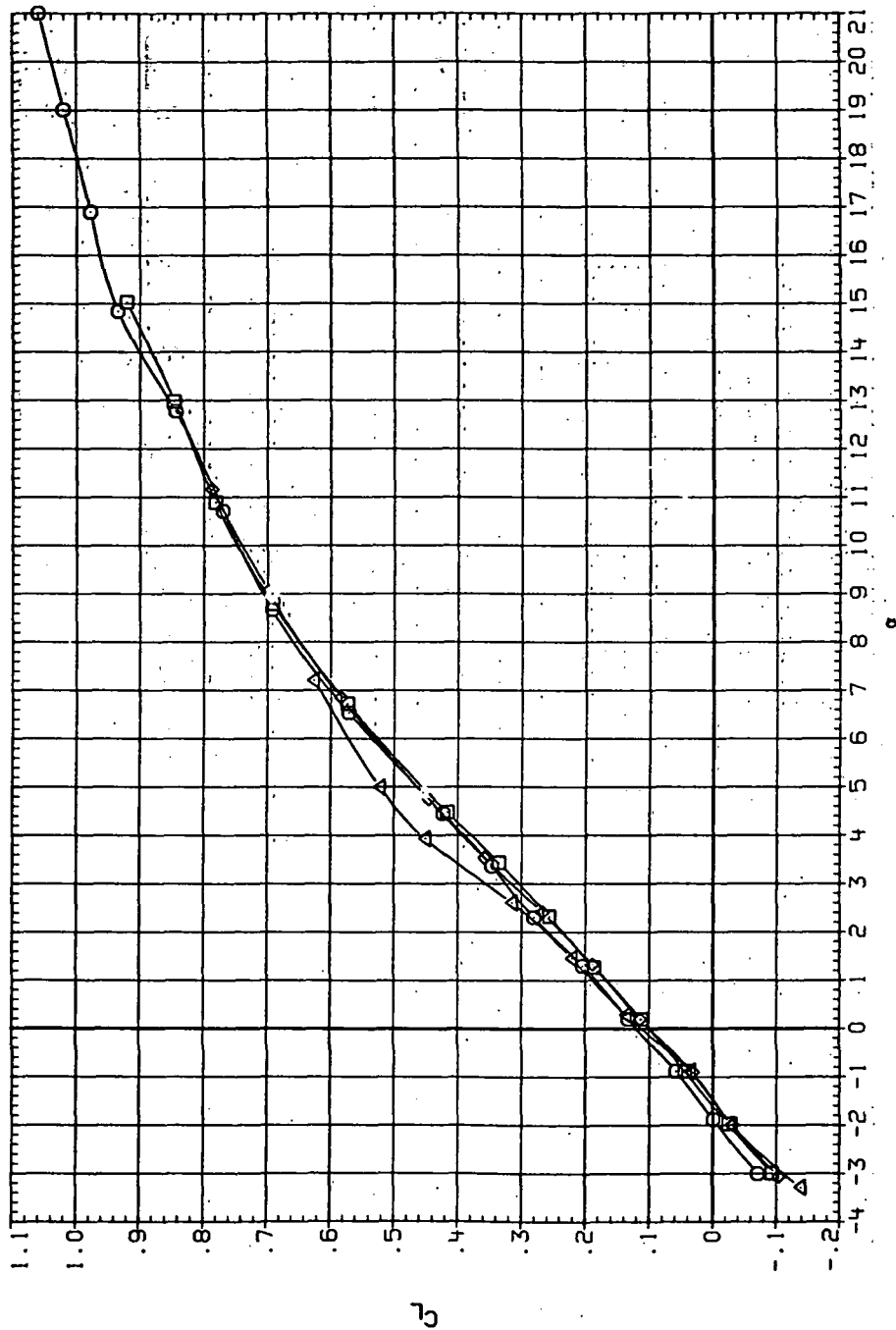


(e) C_y , C_n and C_l vs C_L .

Figure 12.- Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR013 $\square$ SH458 (AL)
 RJR053 $\square$ SH458 (AL)
 RJR093 $\square$ SH458 (AL)
 RJR133 $\triangle$ SH458 (AL)

PN/L Q (NSM)
 3.280 11.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

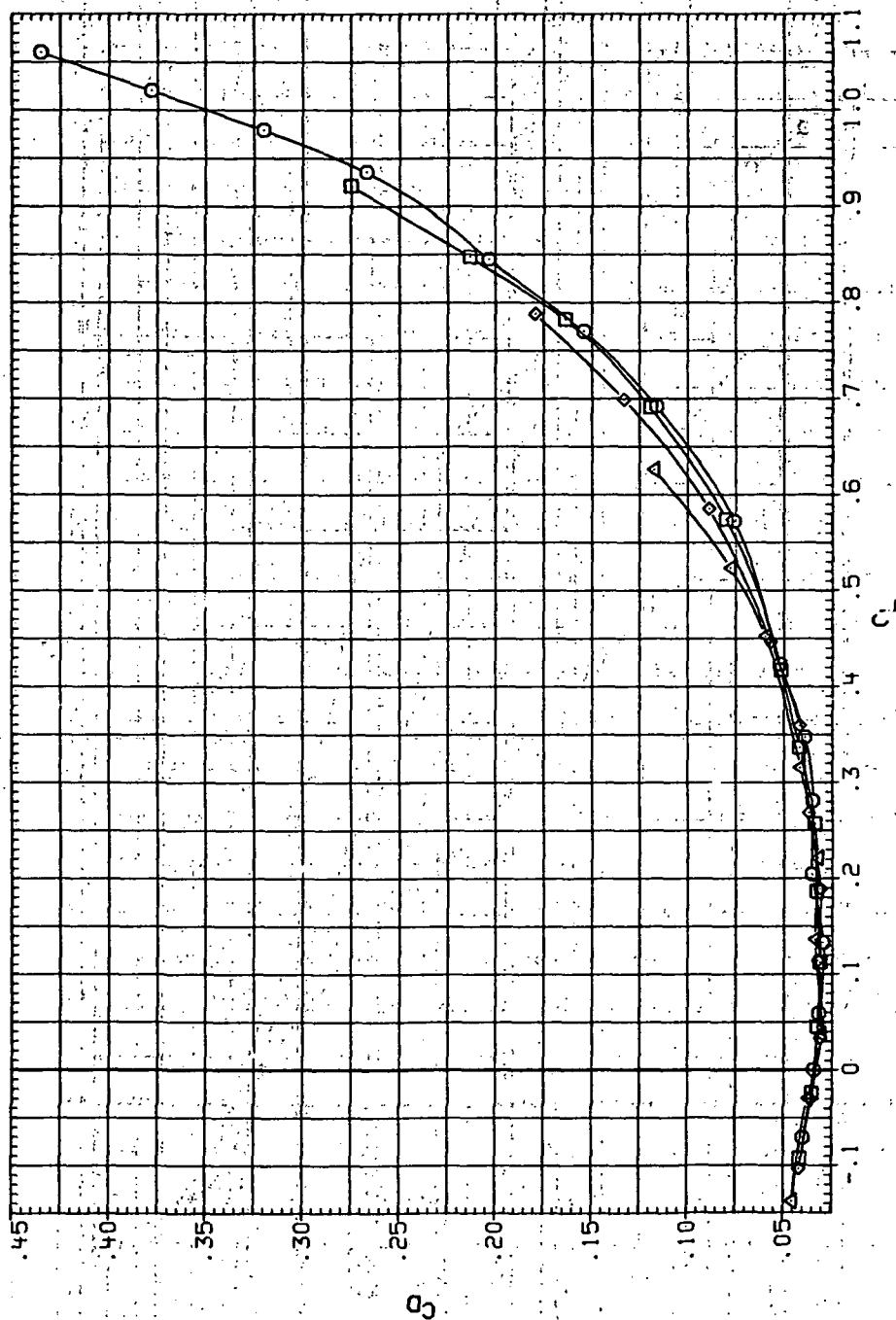


(a) C_L vs α .

Figure 13.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 1.1$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR013 ○
 RJR053 □
 RJR093 ◇
 RJR133 △

RN/L Q(NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

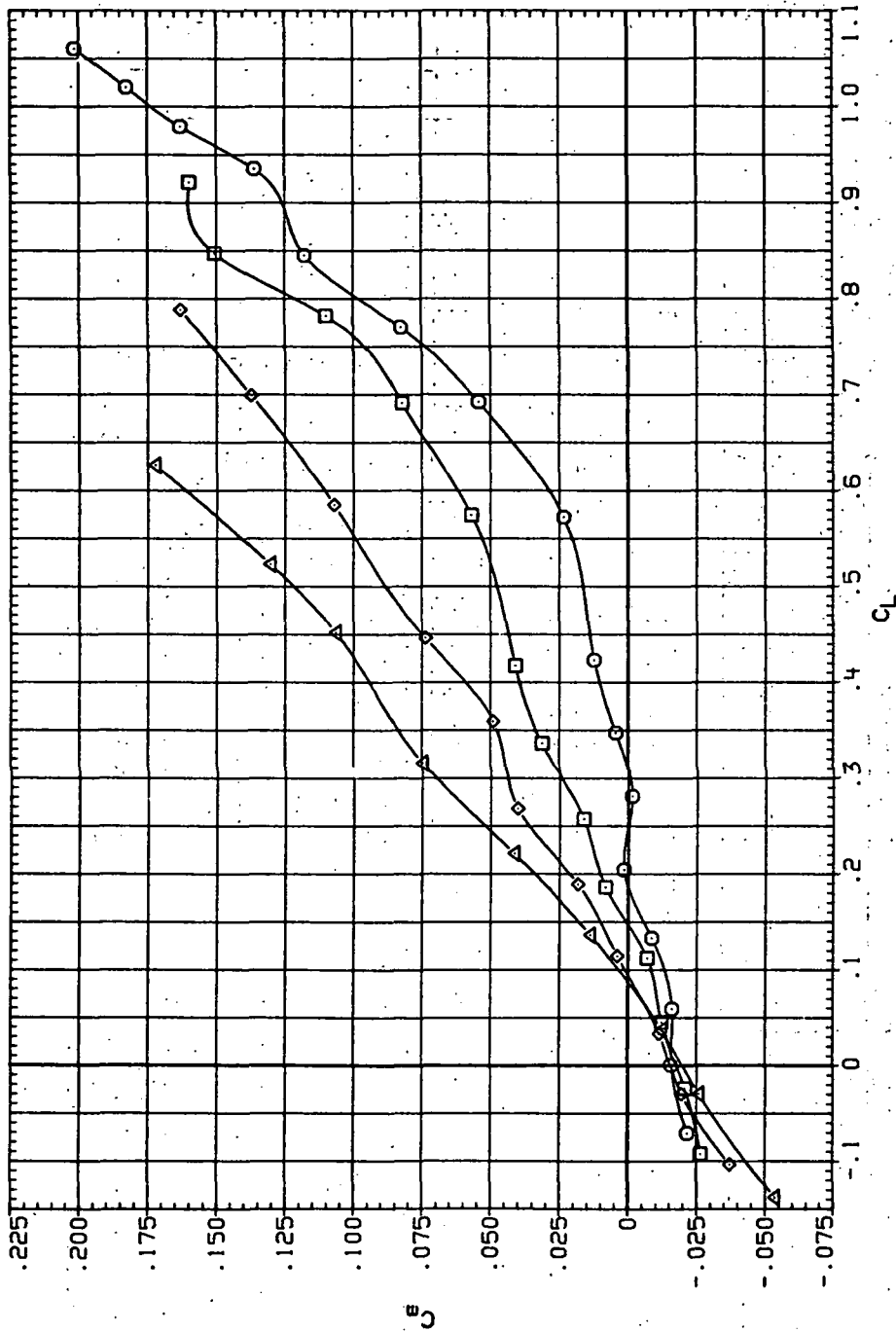


(b) C_D vs C_L

Figure 13. Continued.

DATA SET SYMBOL CONFIGURATION
 RUP013 ○ 9445B (AL)
 RUP032 ◇ 9445B (AL)
 RUP093 △ 9445B (AL)
 RUP133 □ 9445B (AL)

RN/L Q (INSH)
 3.280 8.450
 4.550 11.900
 6.250 16.400
 8.200 21.200



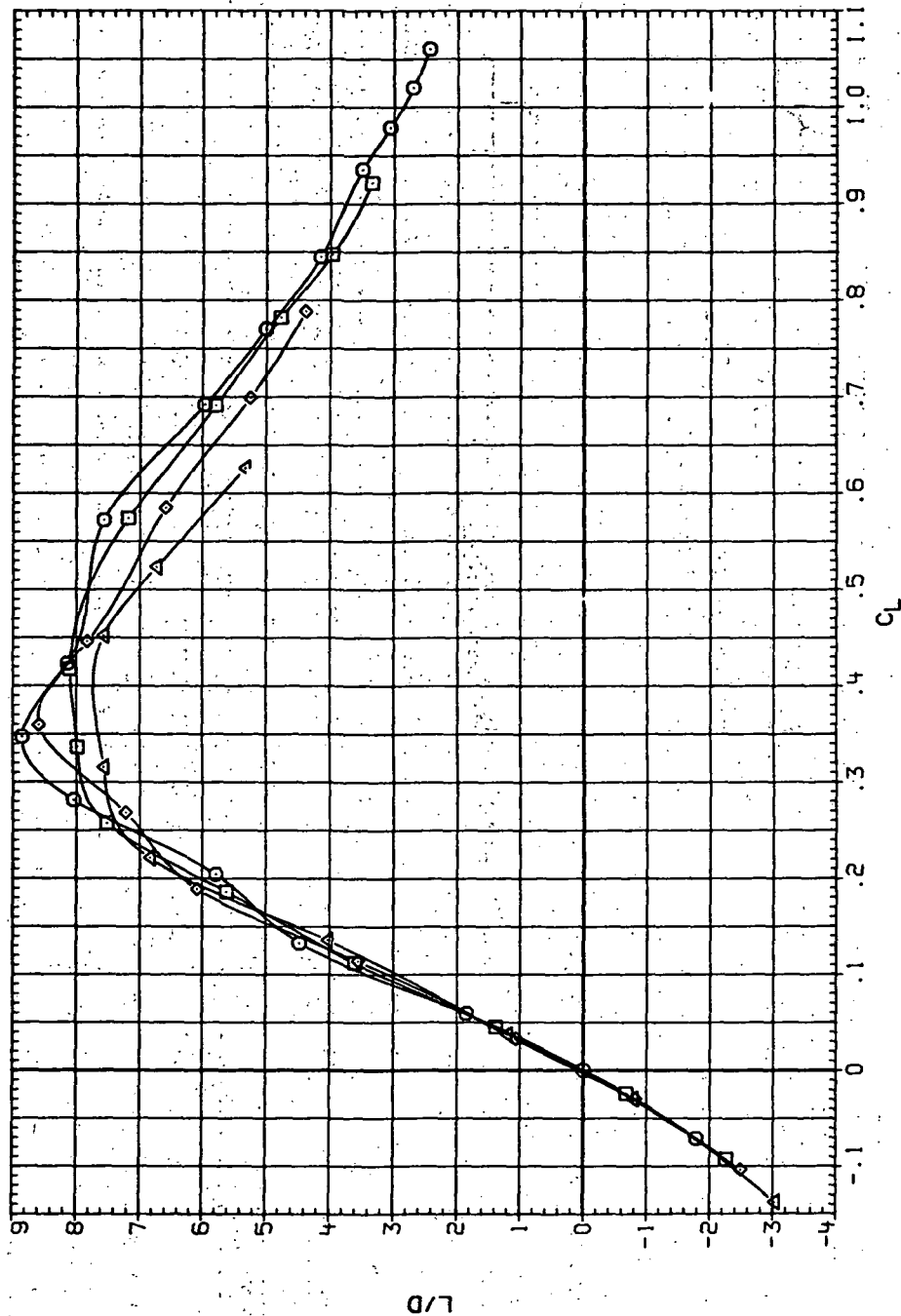
(c) C_m vs C_L .

Figure 13.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR013 ○ 9M58 (AL)
 RJR053 □ 9M58 (AL)
 RJR093 ◇ 9M58 (AL)
 RJR133 △ 9M58 (AL)

RN/L 0 (NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

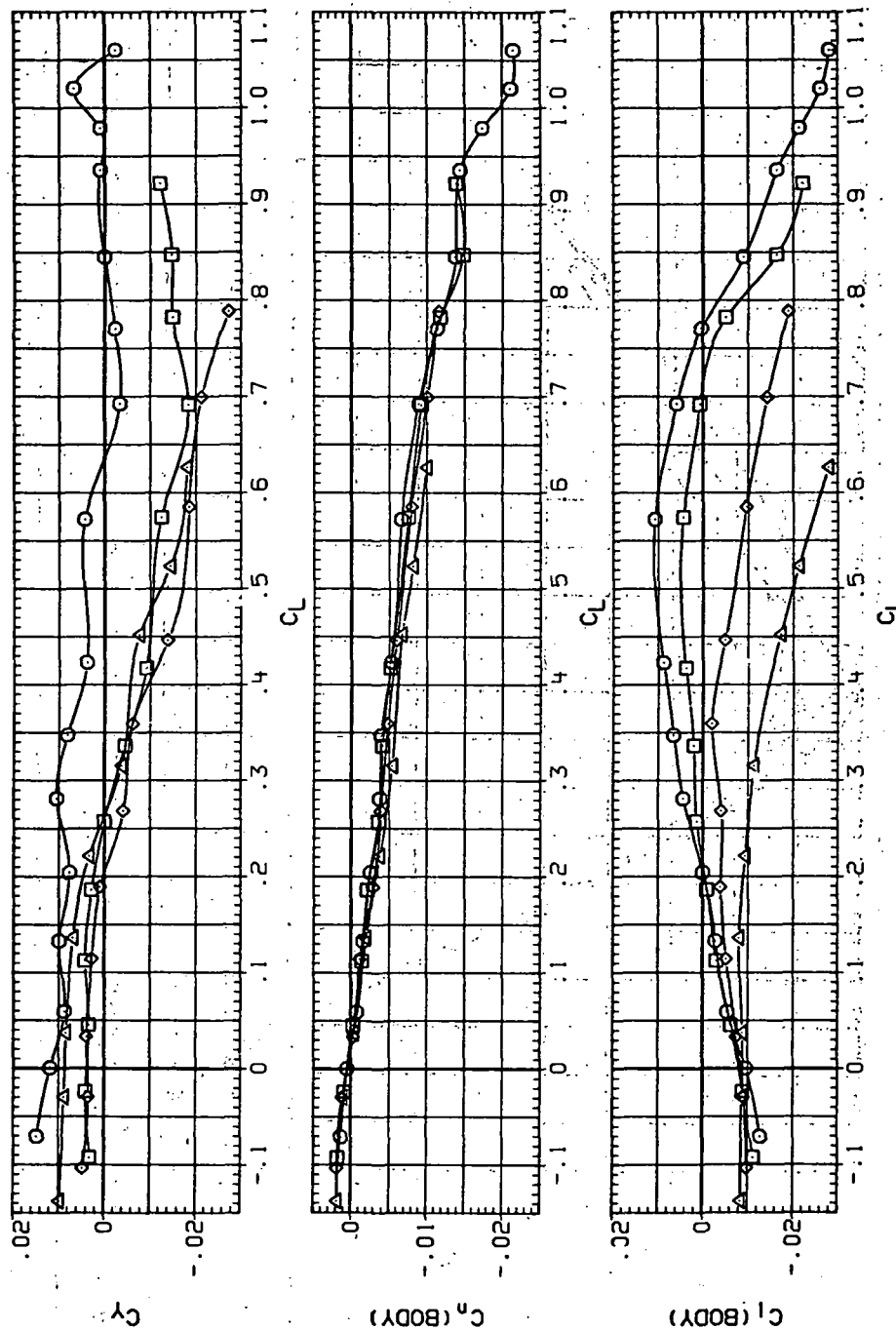


(d) L/D vs C_L .

Figure 13.— Continued.

DATA SET SYMBOL	SYMBOL	SYMBOL CONFIGURATION
RJR013	□	9W45B (AL)
RJR053	□	9W45B (AL)
RJR093	◇	9W45B (AL)
RJR133	△	9W45B (AL)

PN/L	Q (NSM)
3.280	8.450
4.590	11.900
6.230	16.400
8.200	21.200



(e) C_Y , C_n and C_θ vs C_L .

Figure 13.— Concluded.

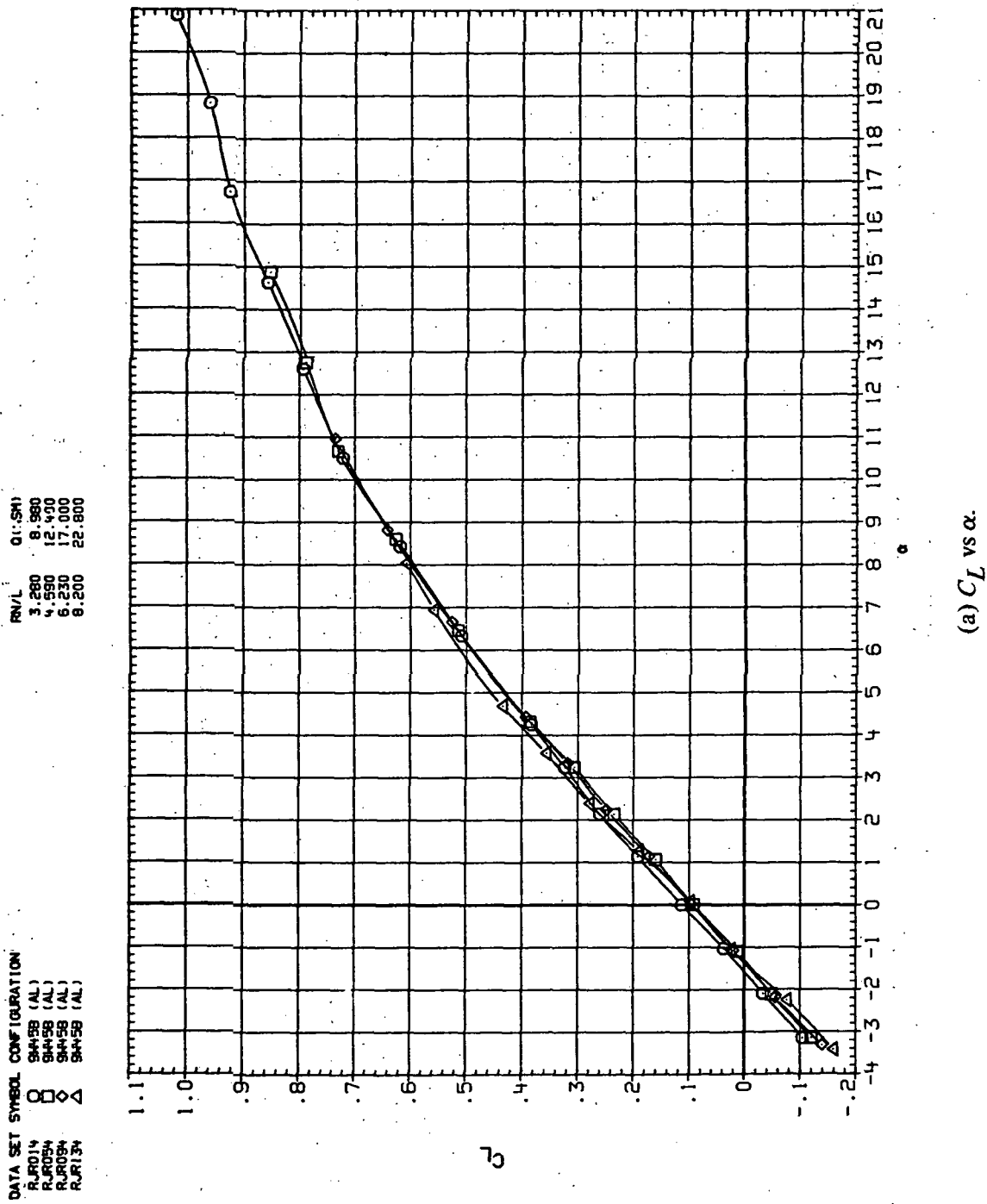
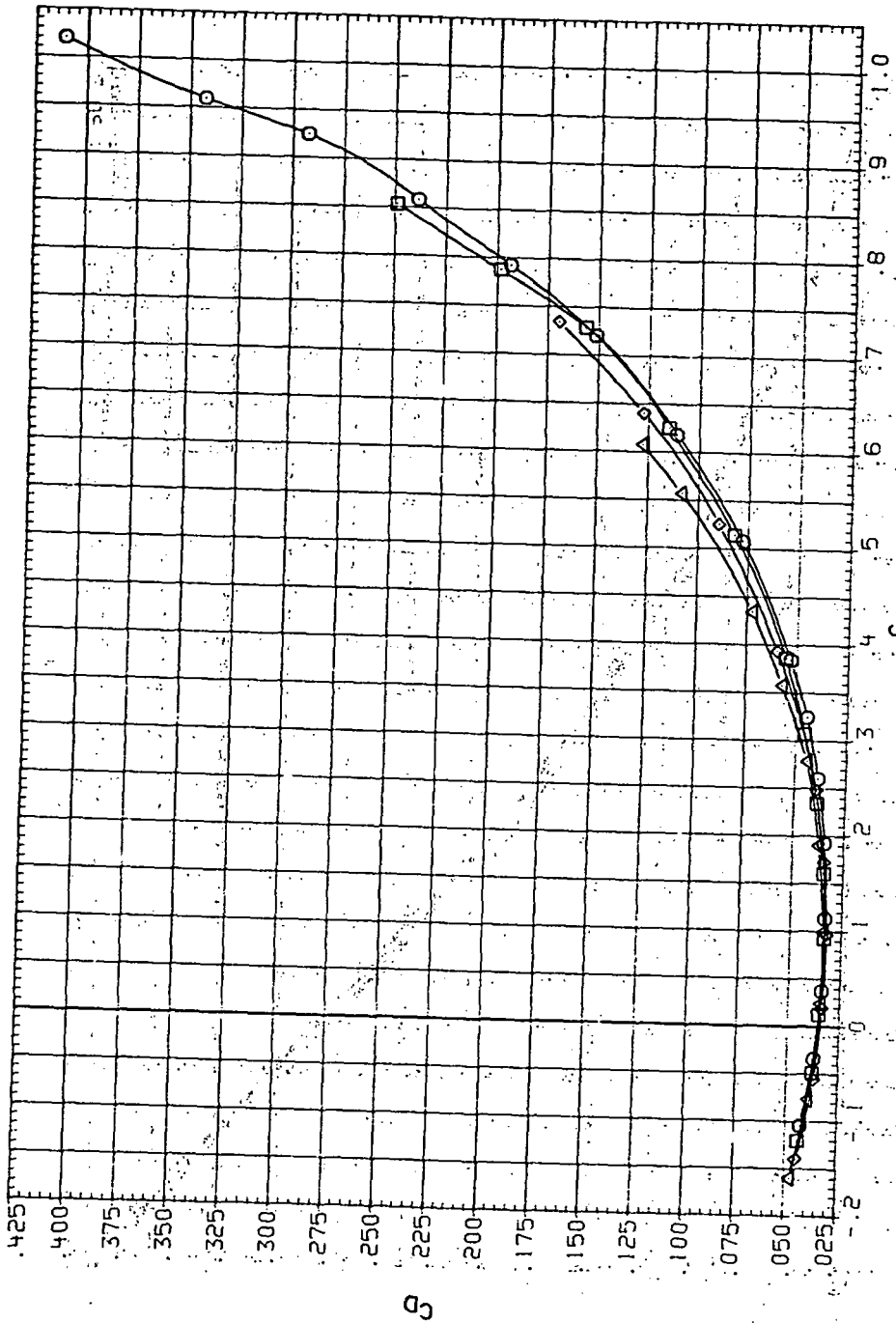


Figure 14.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M \approx 1.2$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR01N ○ SJH5B (AL)
 RJR05N □ SJH5B (AL)
 XJR09N △ SJH5B (AL)
 RJR13N △ SJH5B (AL)

RN/L Q(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800

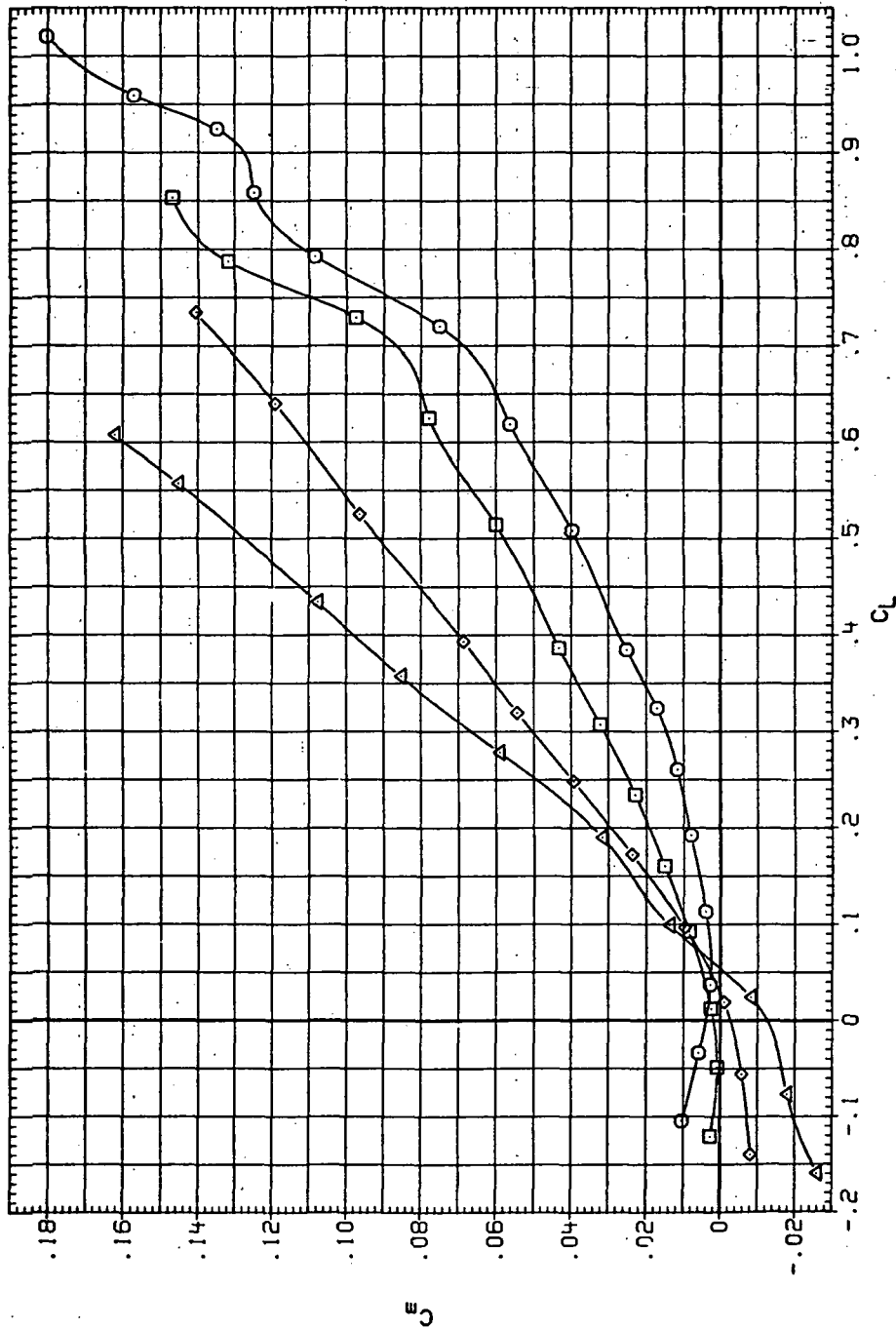


(b) C_D vs C_L .

Figure 14. - Continued.

DATA SET SYMBOL CONFIGURATION
 RUR014 ○ 94A5B (AL)
 RUR054 ◇ 94A5B (AL)
 RUR094 △ 94A5B (AL)
 RUR134 △ 94A5B (AL)

RN/L Q(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800

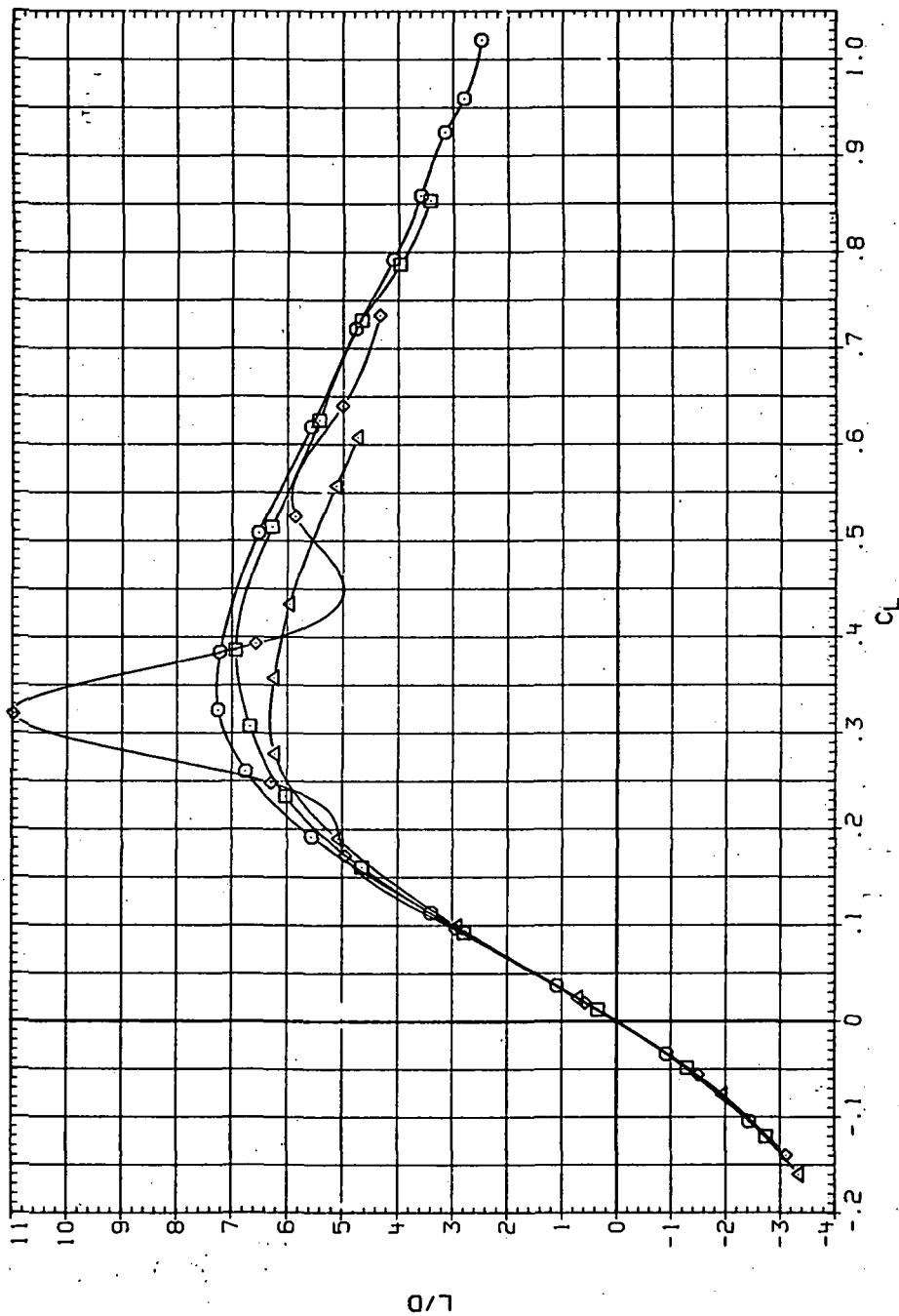


(c) C_m vs C_L .

Figure 14.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJRJ14 $\square$ SH45B (AL)
 RJRJ54 $\square$ SH45B (AL)
 RJRJ54 $\square$ SH45B (AL)
 RJRJ134 Δ SH45B (AL)

RN/L Q(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



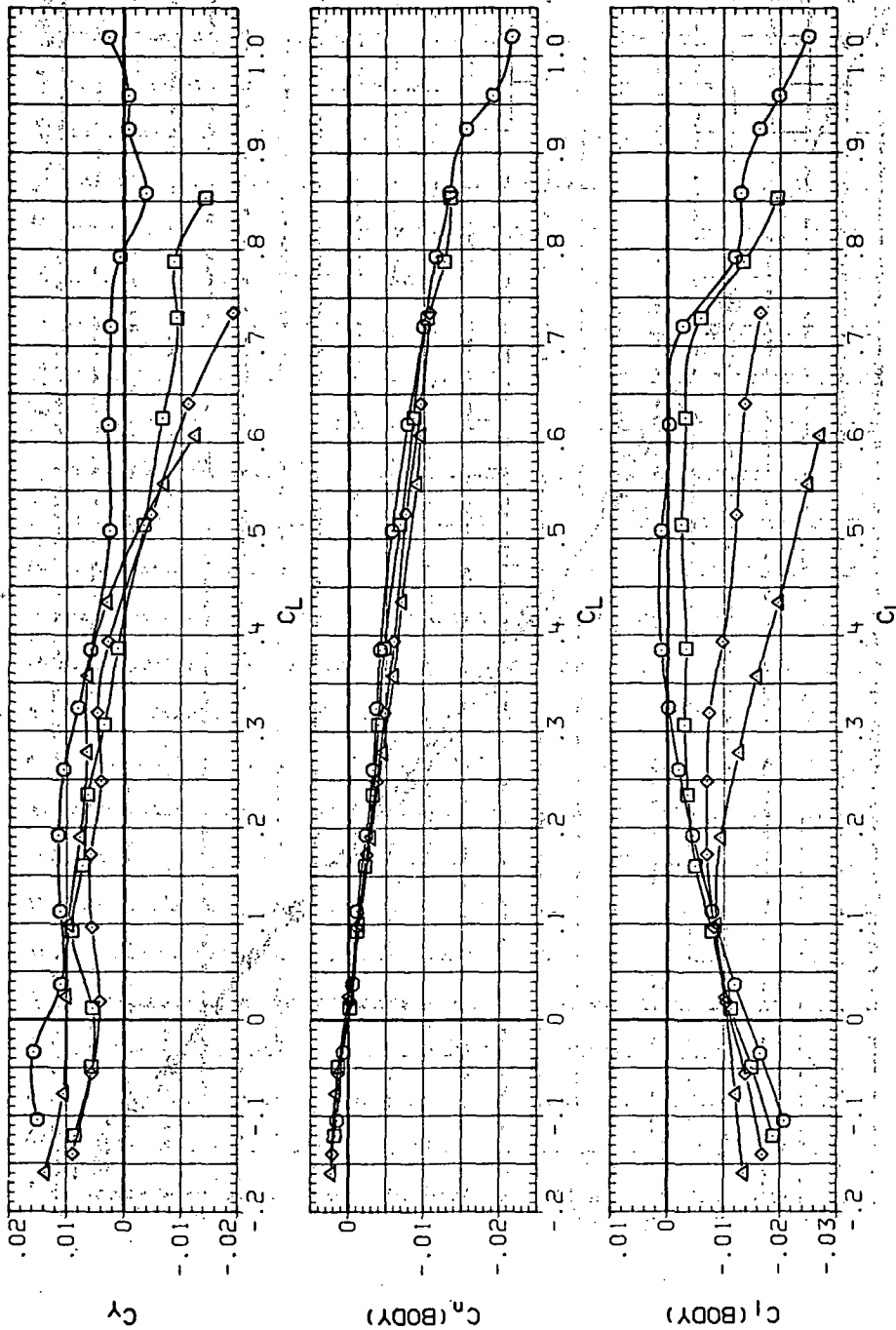
(d) L/D vs C_L

Figure 14.- Continued.

DATA SET SYMBOL CONFIGURATION

RJR014 9H45B (AL)
 RJR054 9H45B (AL)
 RJR094 9H45B (AL)
 RJR134 9H45B (AL)

RN/L Q(NSH)
 3.280 6.980
 4.590 12.400
 6.230 17.000
 8.200 22.800

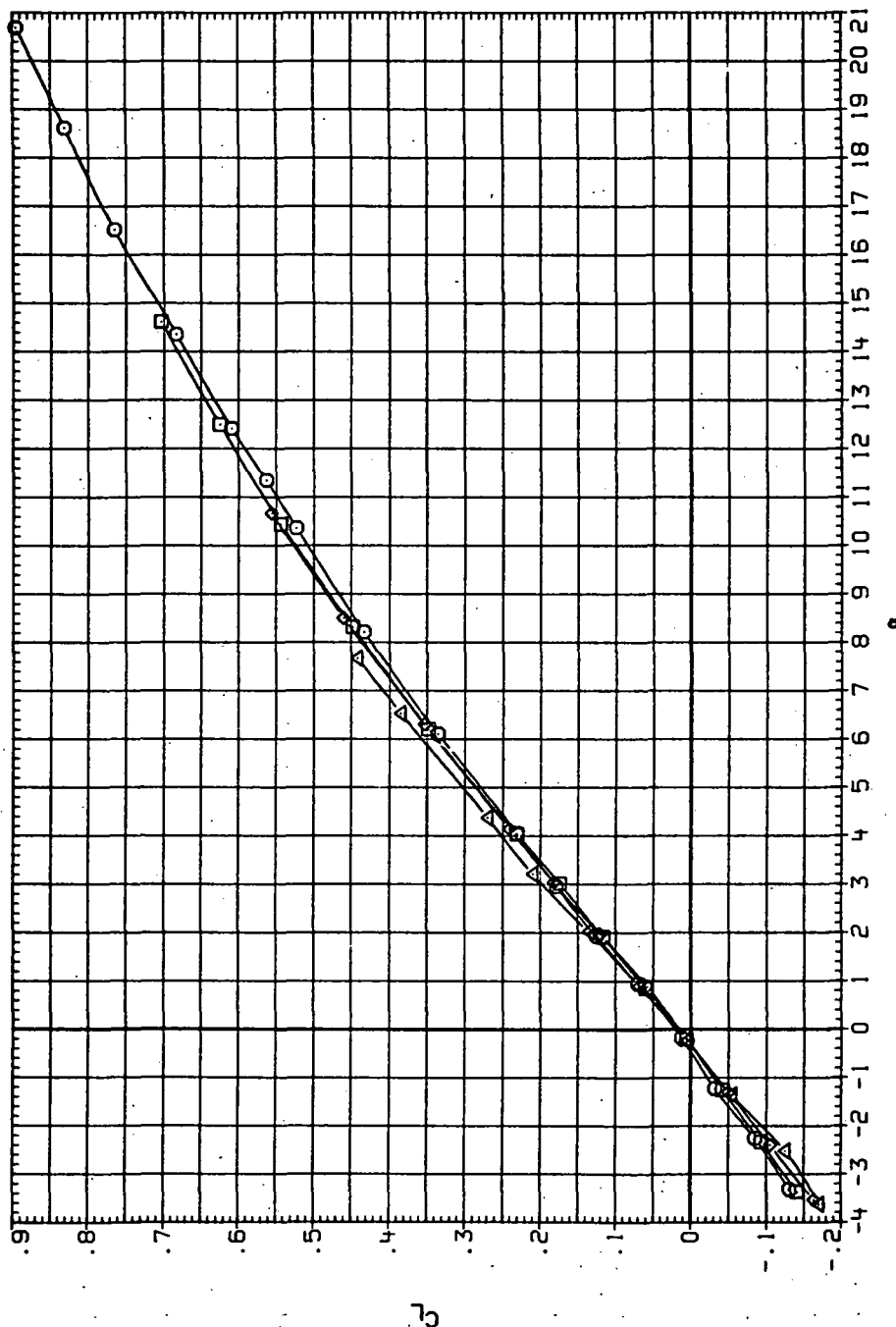


(e) C_Y , C_n and C_l vs C_L .

Figure 14.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR015 $\square$ 94W58 (AL)
 RJR055 $\square$ 94W58 (AL)
 RJR095 $\square$ 94W58 (AL)
 RJR135 $\square$ 94W58 (AL)

RN/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

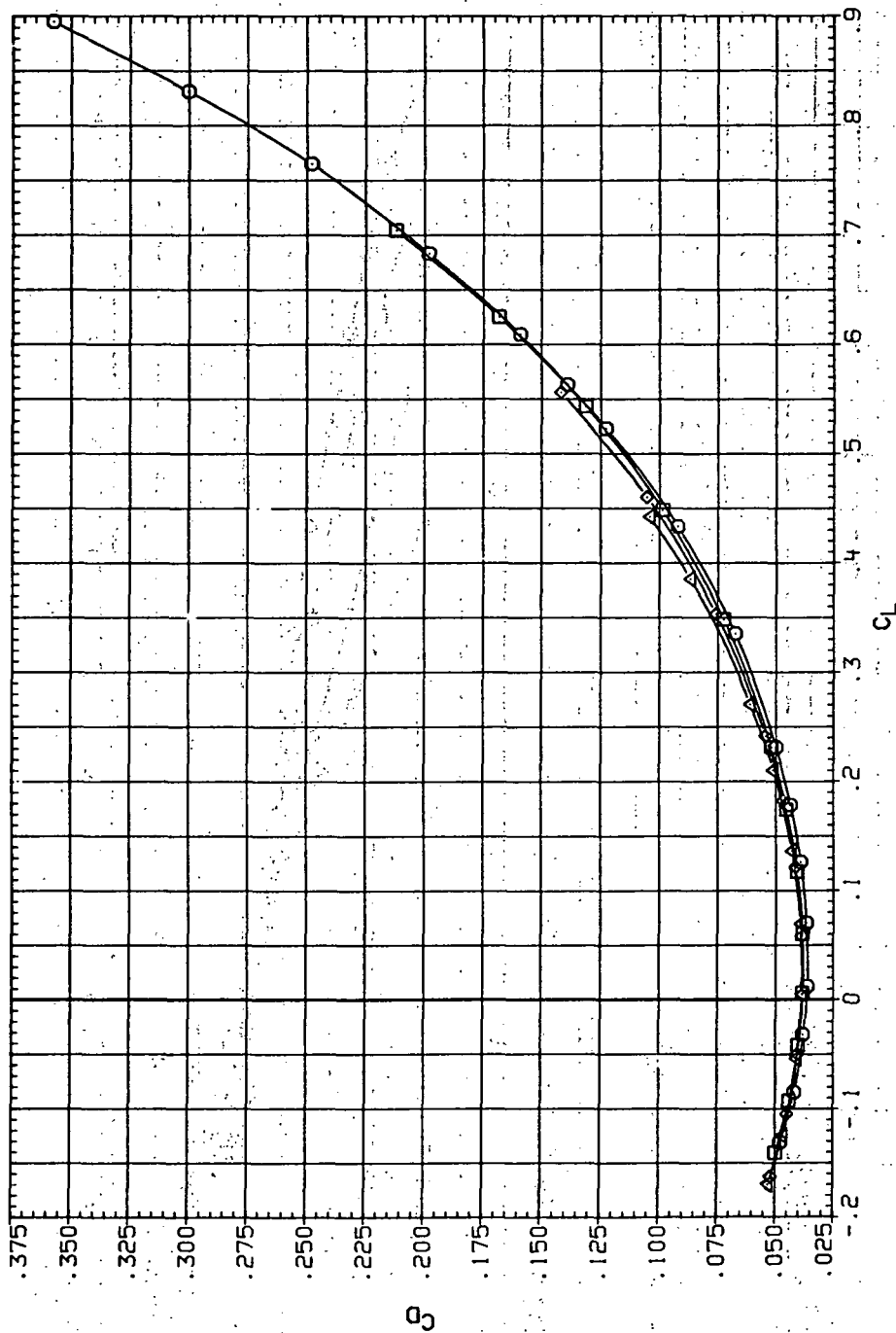


(a) C_L vs α .

Figure 15.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 1.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR015 ○ SH5B (AL)
 RJR055 □ SH5B (AL)
 RJR095 ◇ SH5B (AL)
 RJR135 △ SH5B (AL)

RV/L Q(NSH)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

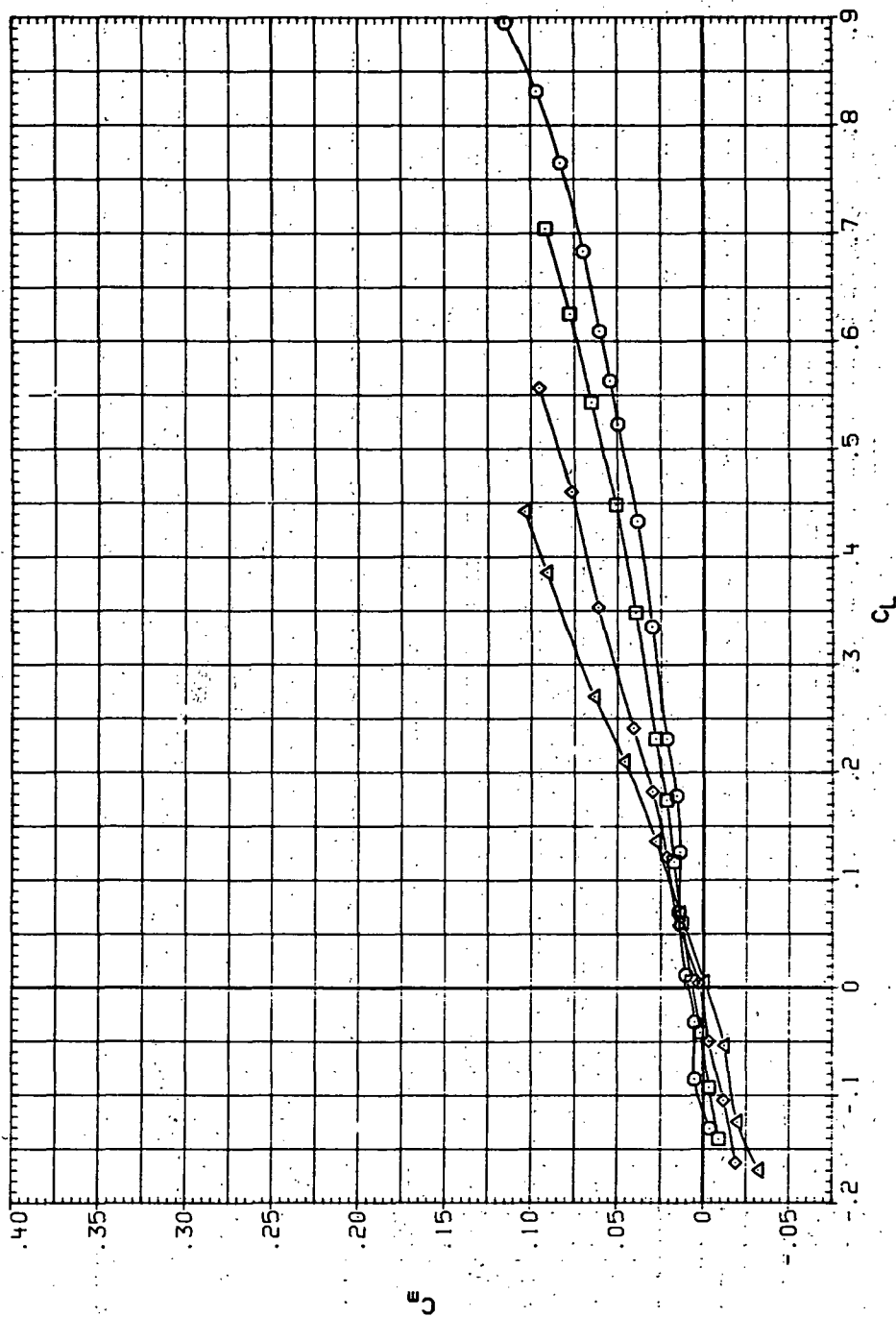


(b) C_D vs C_L .

Figure 15. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR015 94458 (AL)
 RJR055 94458 (AL)
 RJR095 94458 (AL)
 RJR135 94458 (AL)

RV/L Q(NSH)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

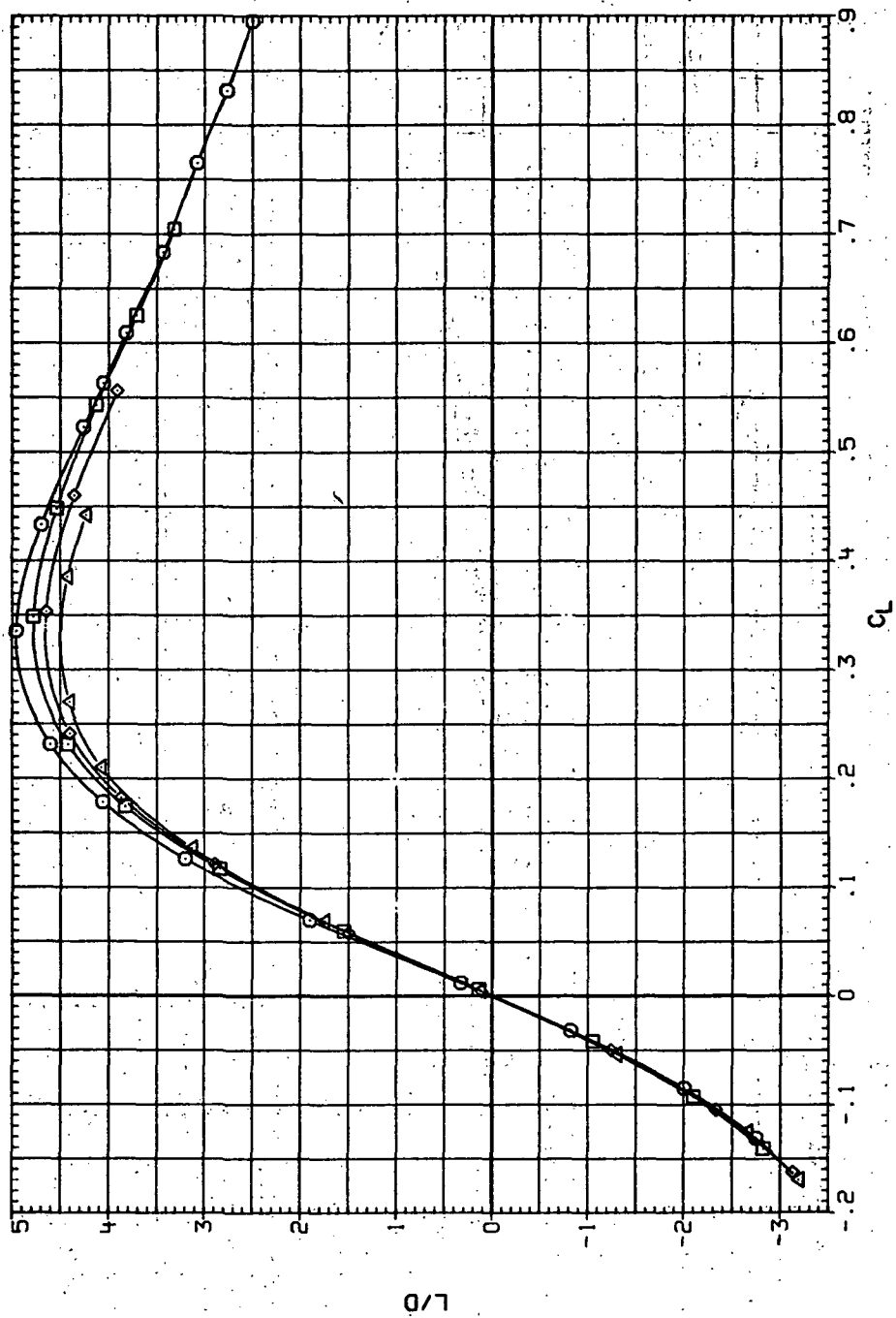


(c) C_m vs C_L

Figure 15.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR015 SHW5B (AL)
 RJR025 SHW5B (AL)
 RJR035 SHW5B (AL)
 RJR135 SHW5B (AL)

RN/L Q1:SH1
 3.200 9.420
 4.500 13.400
 6.230 18.600
 8.200 24.400

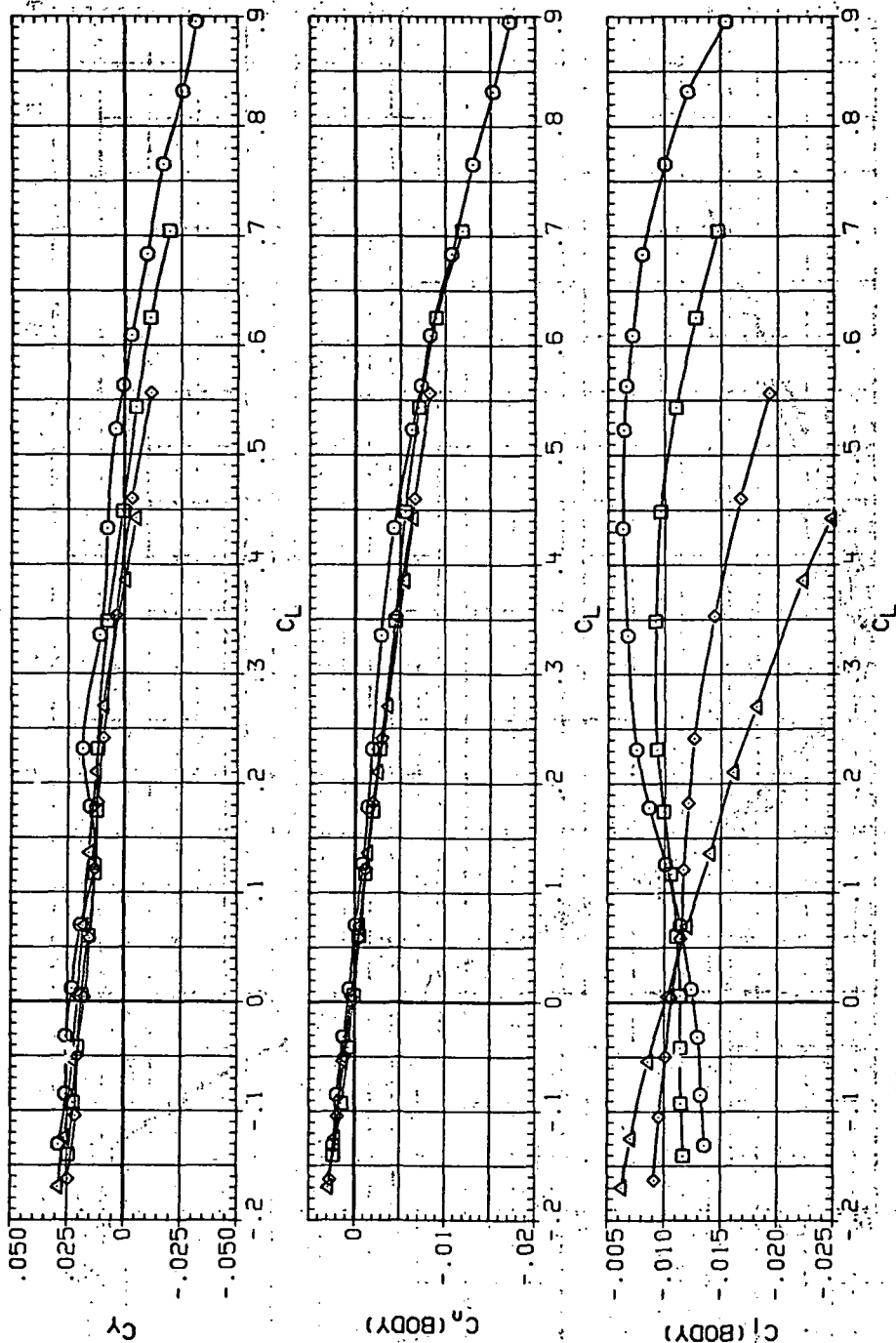


(d) L/D vs C_L .

Figure 15.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUR018 $\square$ SNA58 (AL)
 RUR055 $\square$ SNA58 (AL)
 RUR059 $\square$ SNA58 (AL)
 RUR133 $\square$ SNA58 (AL)

PN/L Q(NE.)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400



(e) C_Y , C_N and C_I vs C_L .

Figure 15.— Concluded.

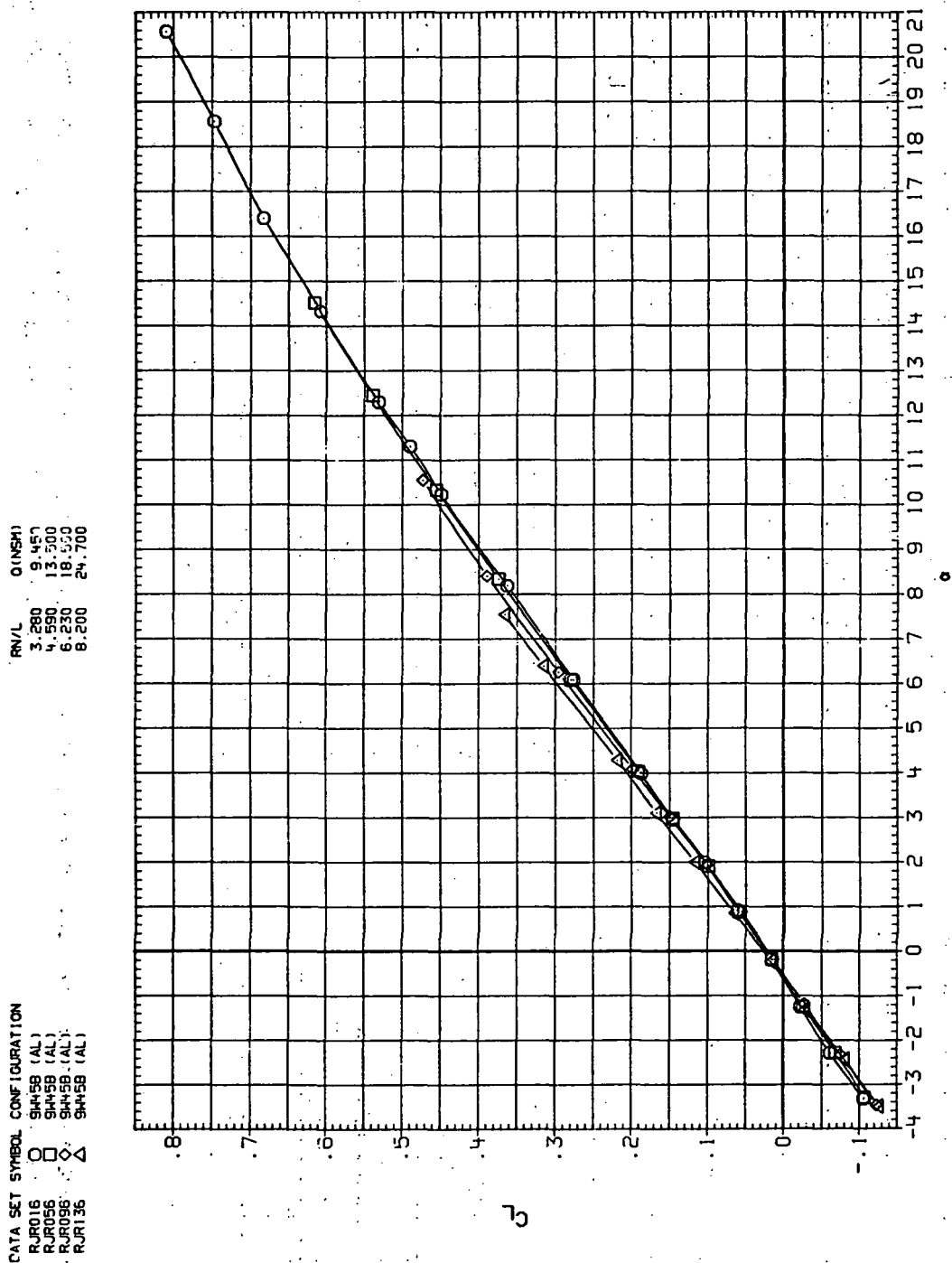
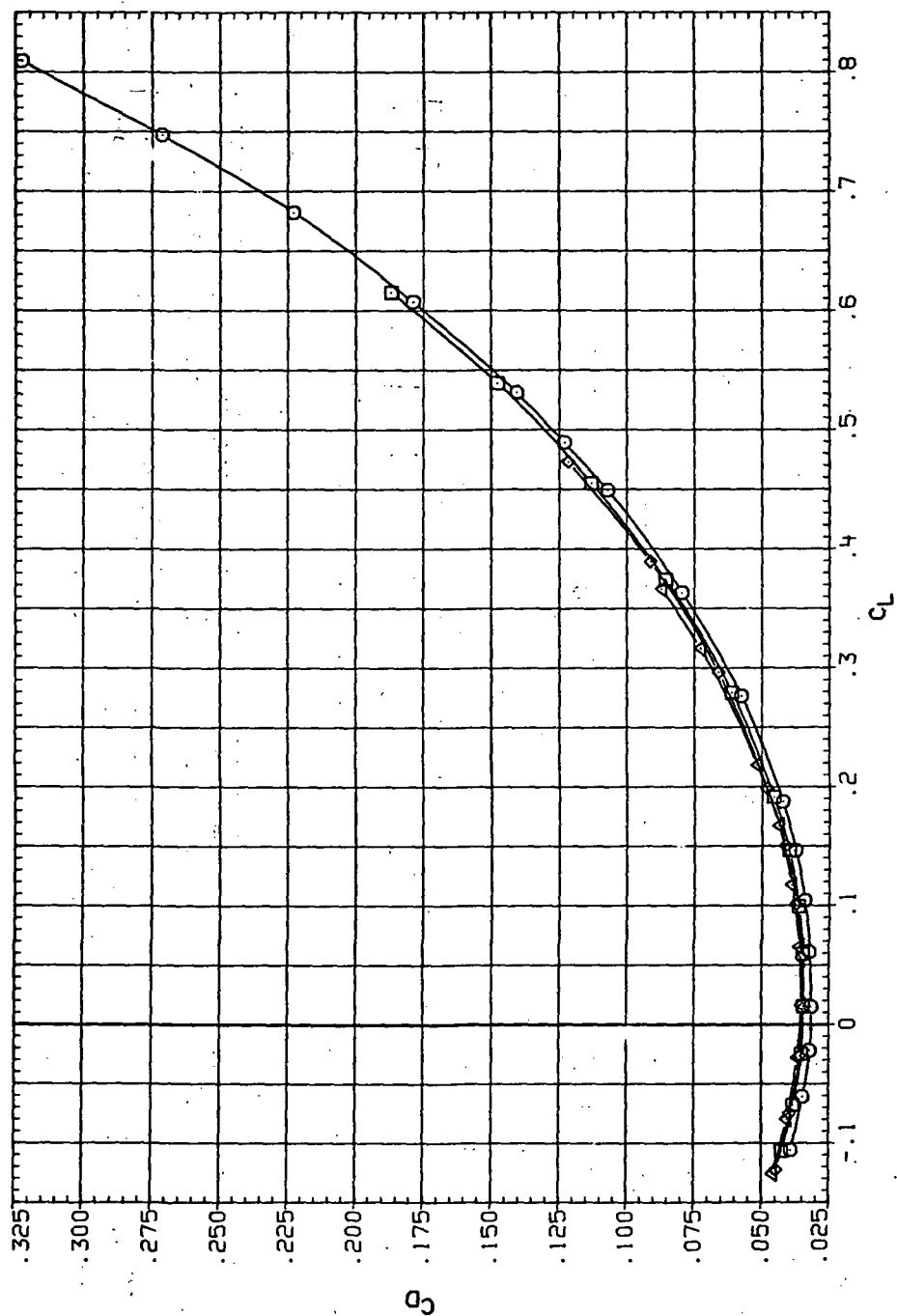


Figure 16.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 2.0$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUP016 □ 9H-5B (AL)
 RUP056 □ 9H-5B (AL)
 RUP095 △ 9H-5B (AL)
 RUP135 △ 9H-5B (AL)

RN/L Q(NSH)
 3.260 9.450
 3.590 13.500
 6.230 18.500
 8.200 24.700

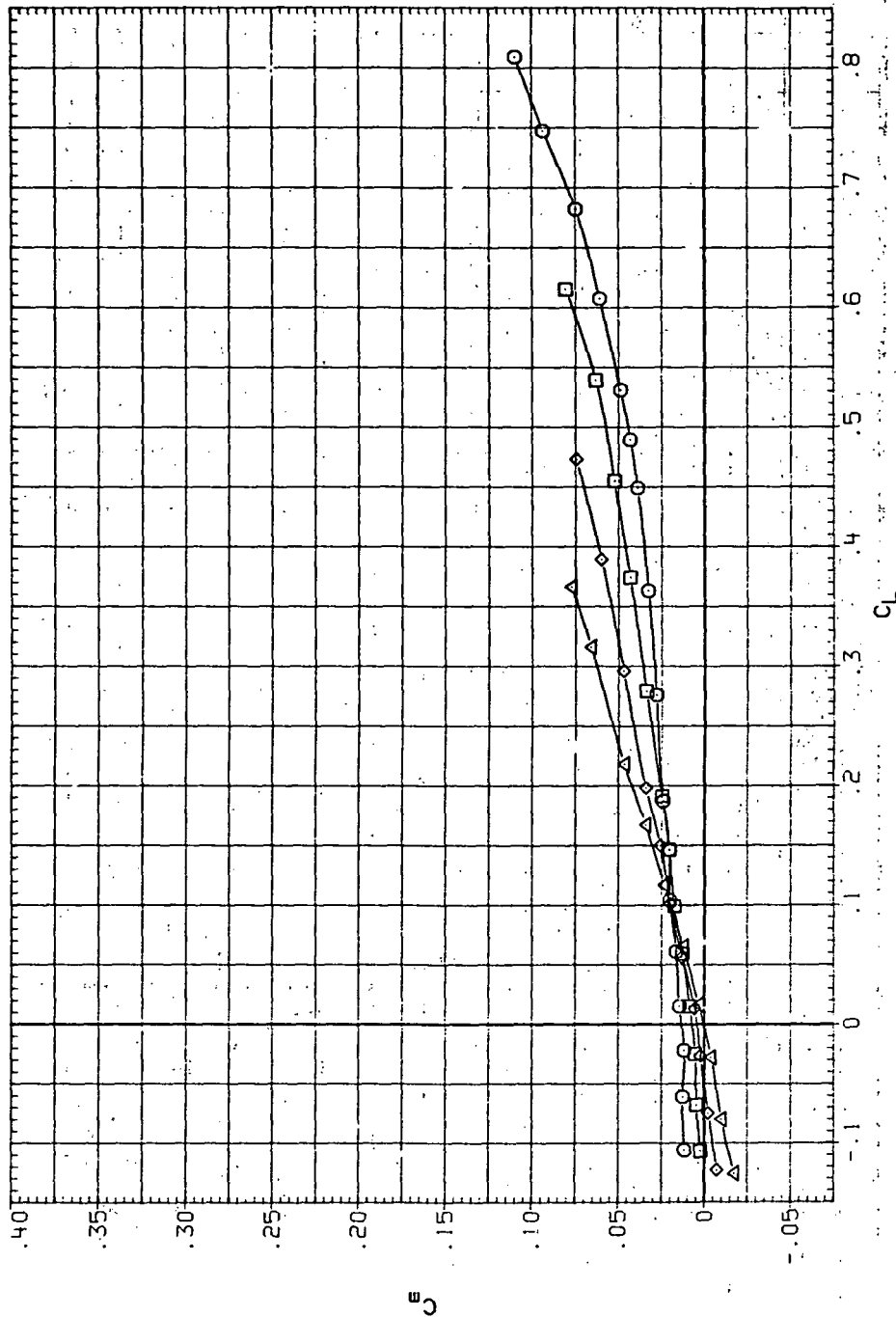


(b) C_D vs C_L

Figure 16.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR015 SHH5B (AL)
 RJR056 SHH5B (AL)
 RJR096 SHH5B (AL)
 RJR136 SHH5B (AL)

RN/L Q(NSM)
 3.290 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

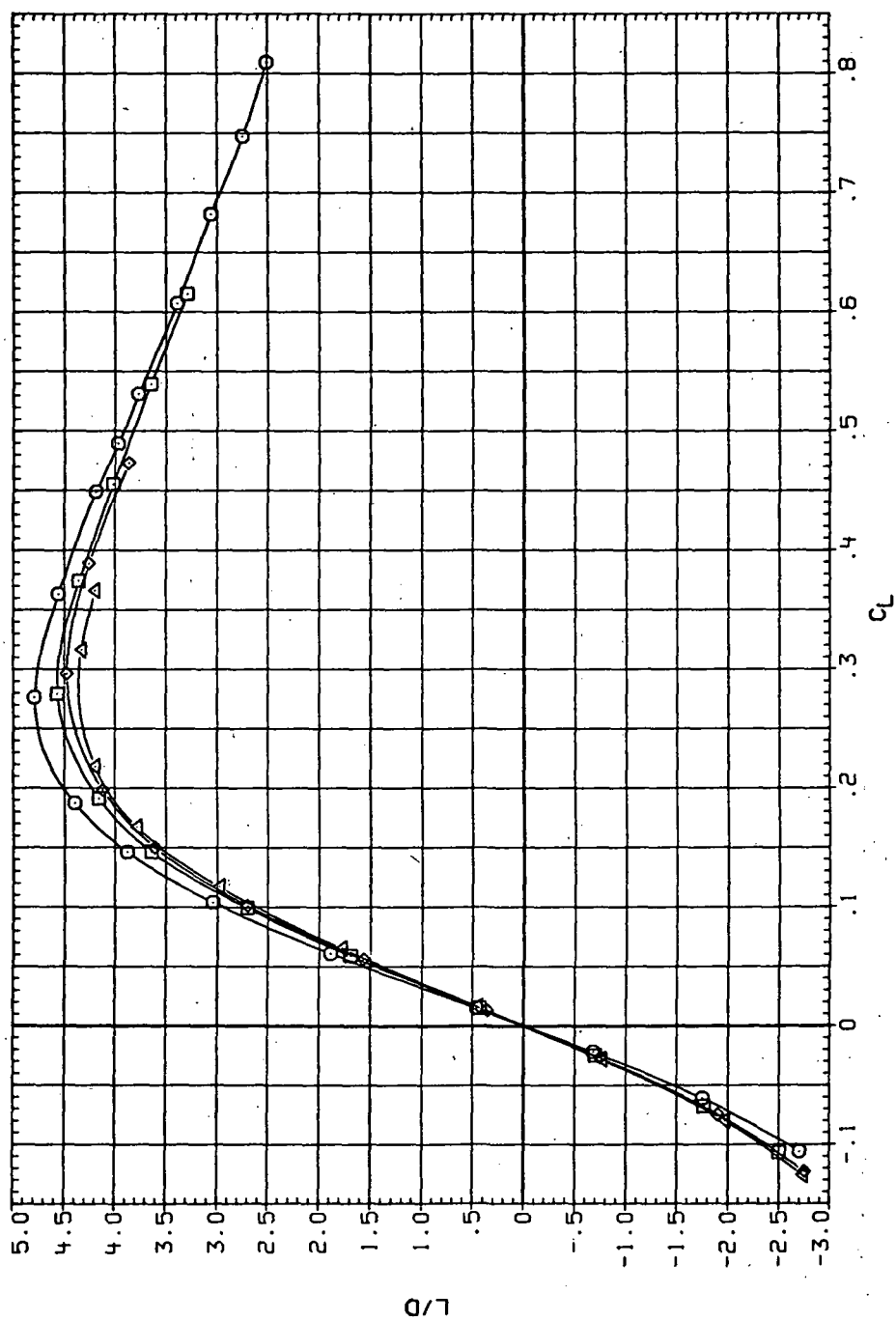


(c) C_m vs C_L

Figure 16.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR016 ○ SH45B (AL)
 RJR056 □ SH45B (AL)
 RJR096 ◇ SH45B (AL)
 RJR135 △ SH45B (AL)

RN/L Q(NSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

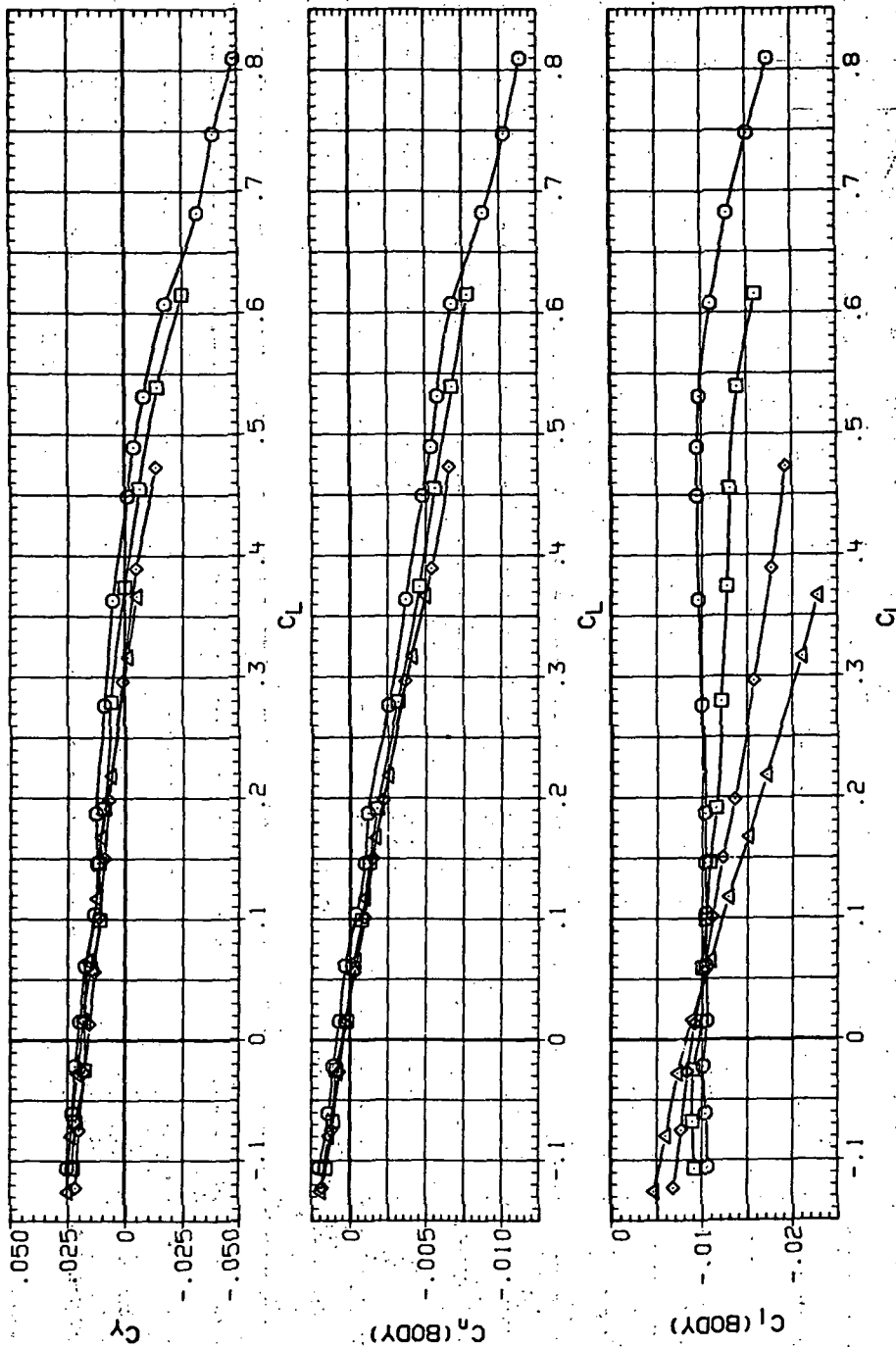


(d) L/D vs C_L .

Figure 16.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR016 SHW56 (AL) $\square$
 RJR056 SHW56 (AL) $\square$
 RJR096 SHW56 (AL) $\square$
 RJR136 SHW56 (AL) $\square$

RN/L Q(NSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

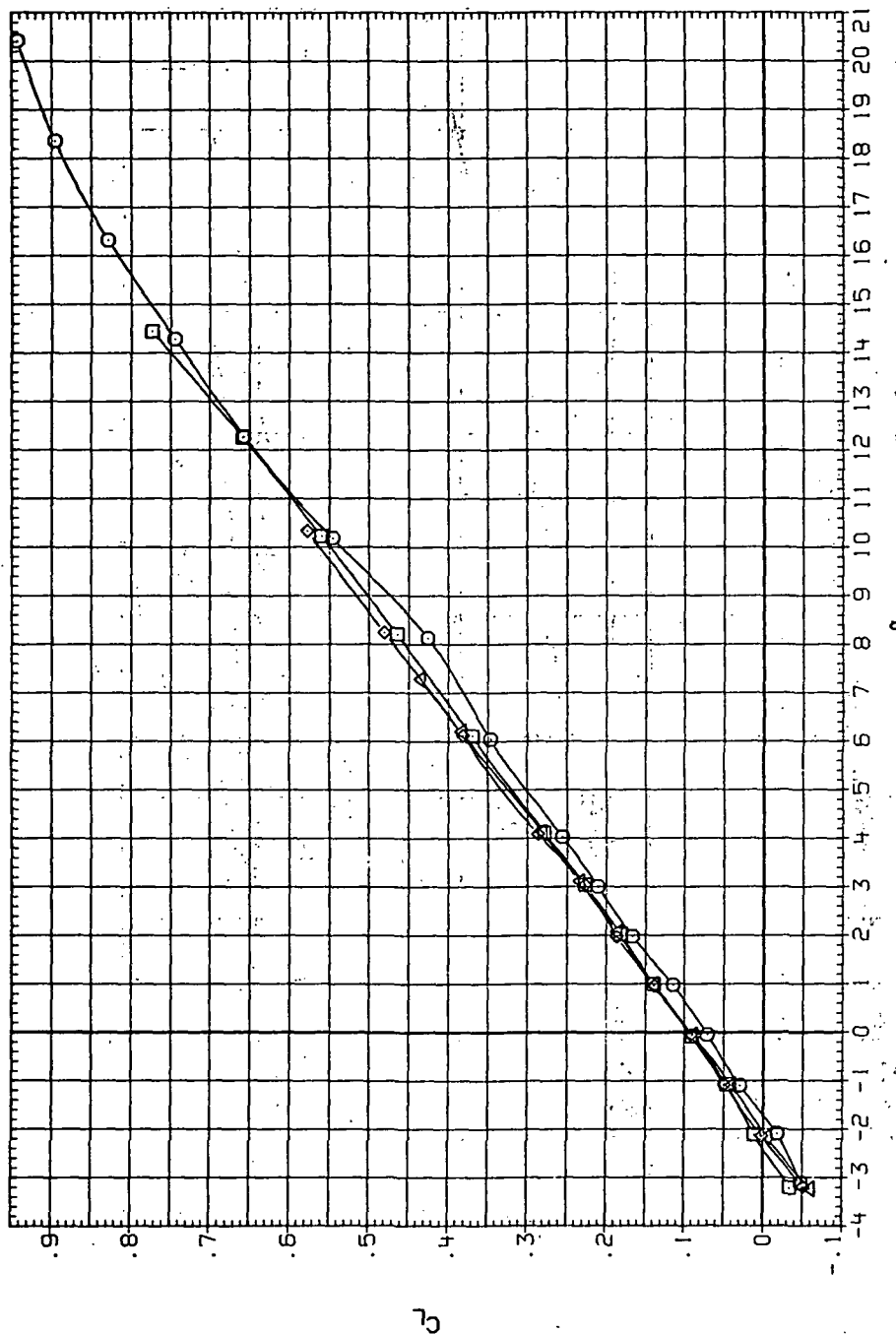


(e) C_Y , C_n and C_l vs C_L .

Figure 16.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR018 ◻ 9A508 (AL)
 RJR058 ◻ 9A508 (AL)
 RJR098 ◻ 9A508 (AL)
 RJR137 ◻ 9A508 (AL)

RN/L Q (NSM)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

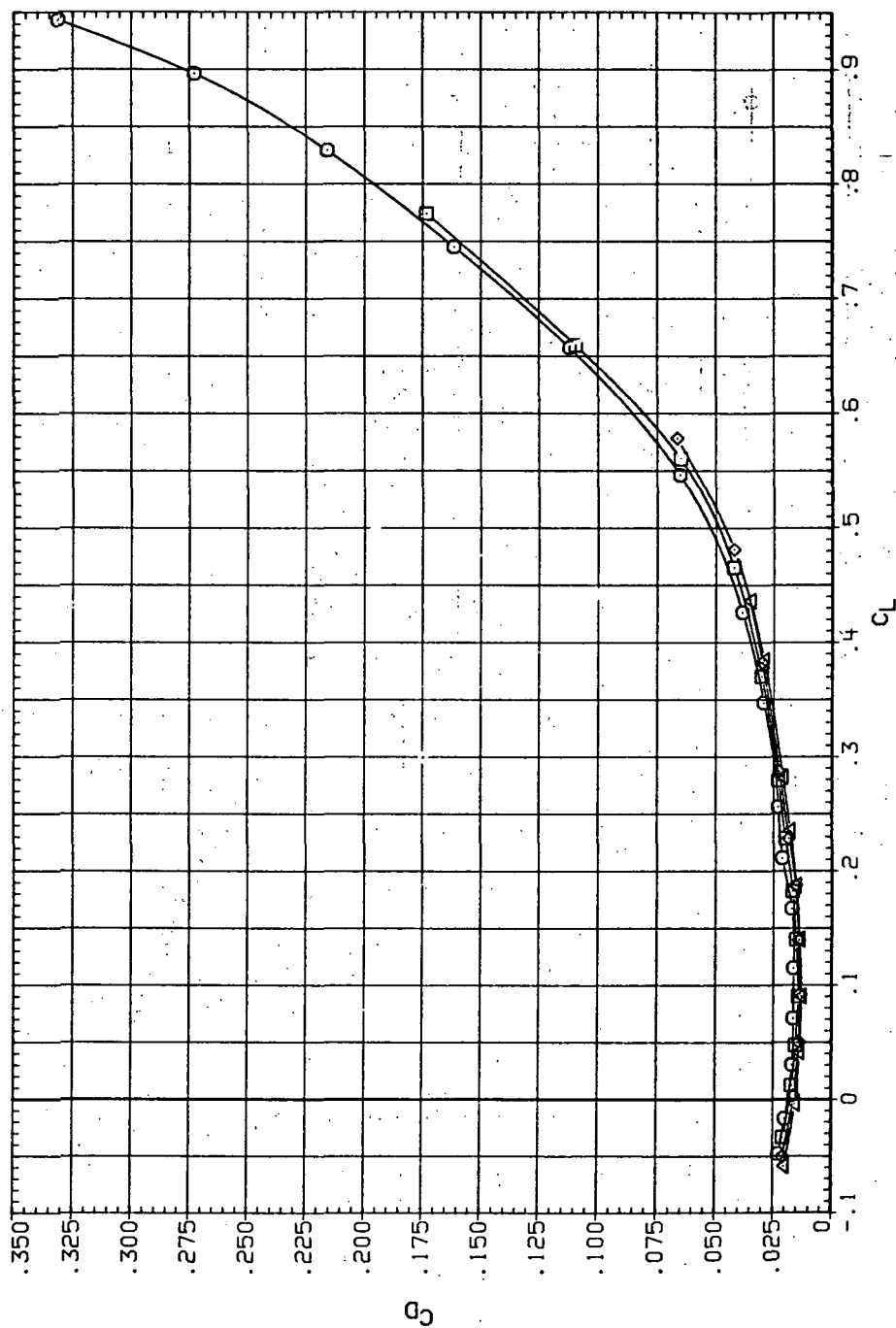


(a) C_L vs α .

Figure 17.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.4$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR018 $\square$ 9A50B (AL)
 RJR058 $\square$ 9A50B (AL)
 RJR098 $\diamond$ 9A50B (AL)
 RJR137 $\triangle$ 9A50B (AL)

RN/L Q(NSH)
 3.280 3.6 0
 4.590 5.400
 6.230 7.490
 8.200 9.900

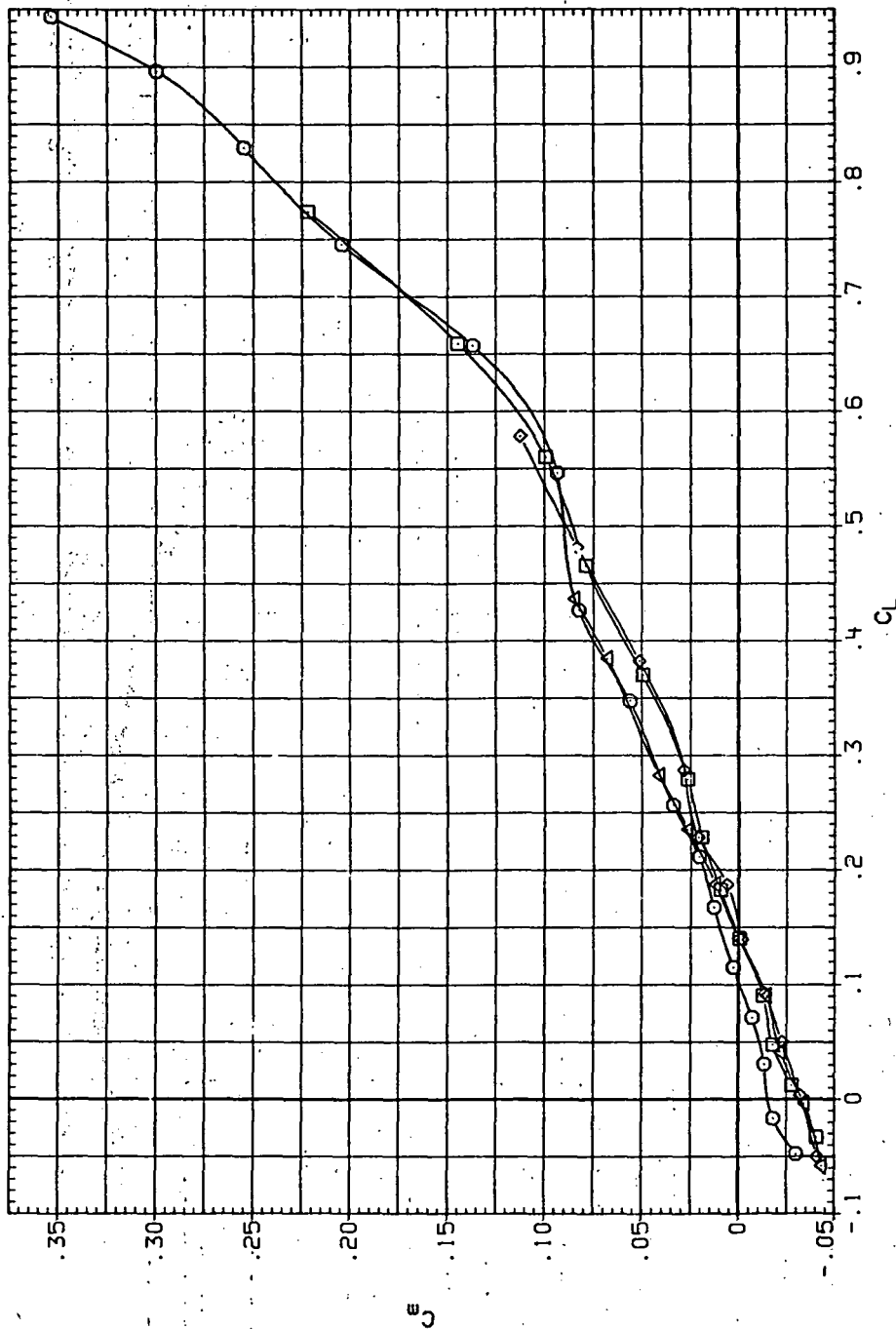


(b) C_D vs C_L

Figure 17.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR018 ○ 9W50B (AL)
 RJR058 □ 9W50B (AL)
 RJR068 ◇ 9W50B (AL)
 RJR137 △ 9W50B (AL)

RN/L Q(NSH)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.500 9.900

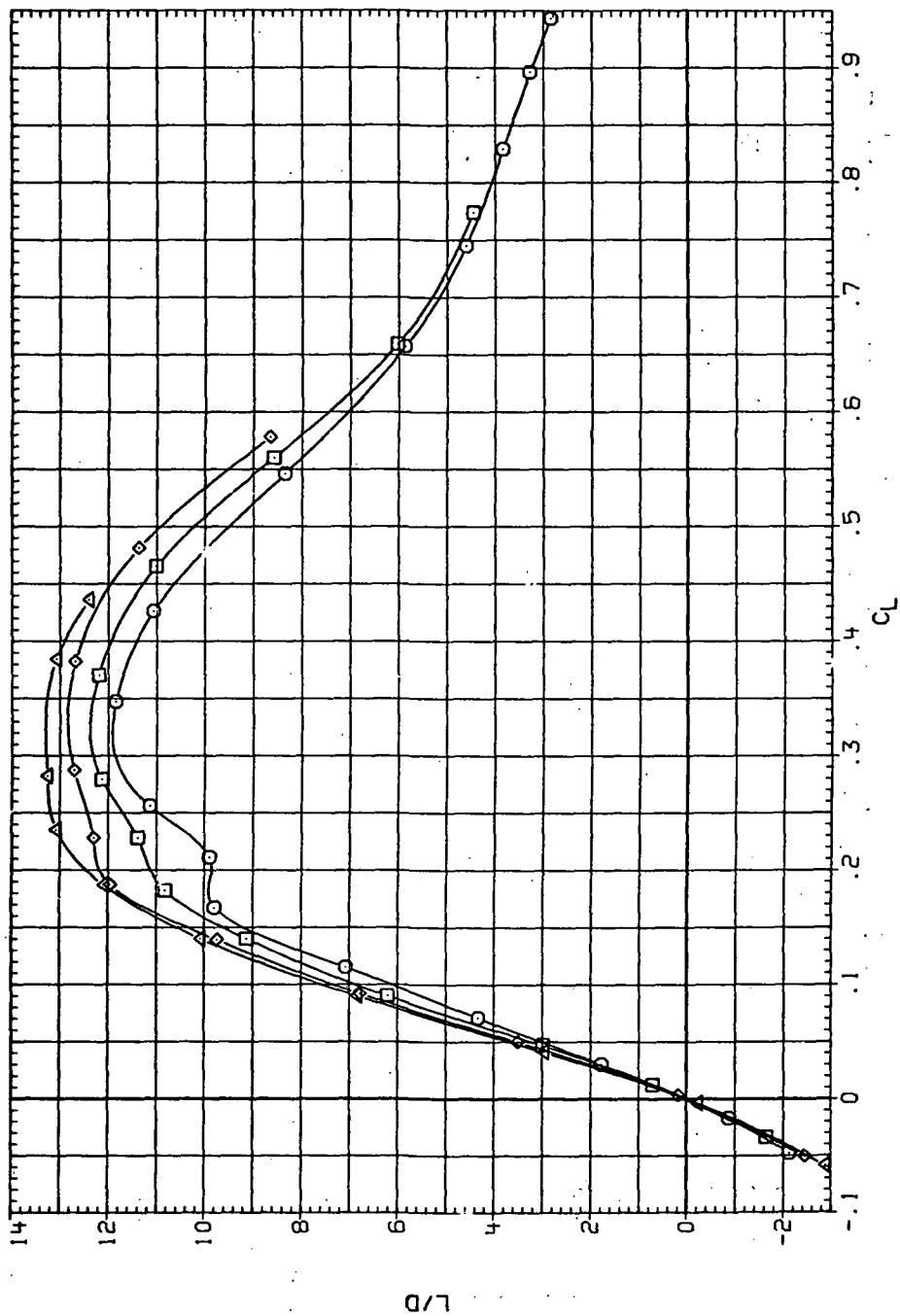


(c) C_m vs C_L .

Figure 17.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR018 9K508 (AL)
 RJR058 9K508 (AL)
 RJR098 9K508 (AL)
 RJR137 9K508 (AL)

RV/L Q(NSM)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

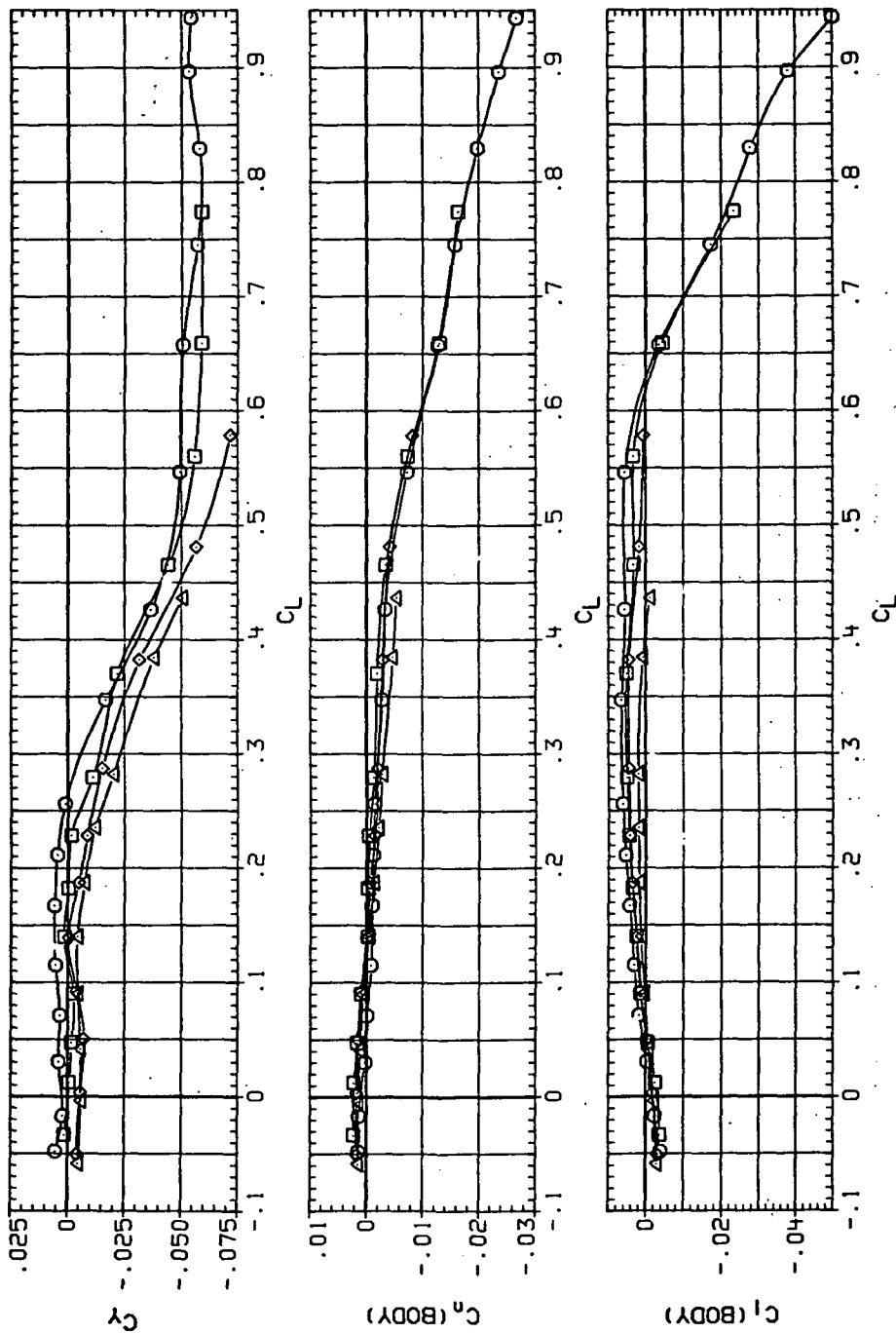


(d) L/D vs C_L .

Figure 17.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR018 94508 (AL)
 RJR058 94508 (AL)
 RJR098 94508 (AL)
 RJR137 94508 (AL)

RM/L Q(NSM)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

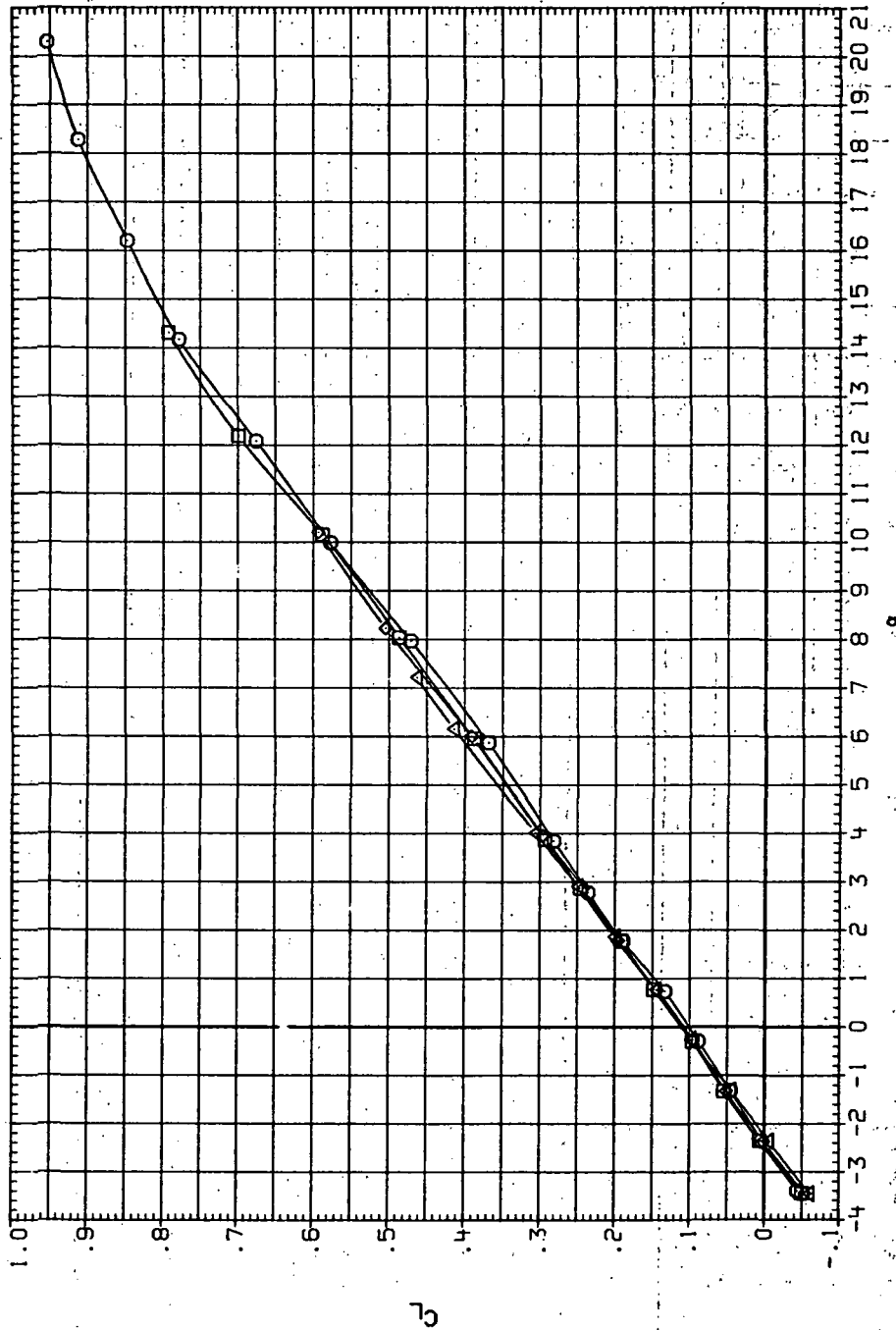


(e) C_Y , C_n and C_q vs C_L .

Figure 17.- Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR019 $\square$ 94508 (AL)
 RJR059 $\square$ 94508 (AL)
 RJR099 $\square$ 94508 (AL)
 RJR139 $\square$ 94508 (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

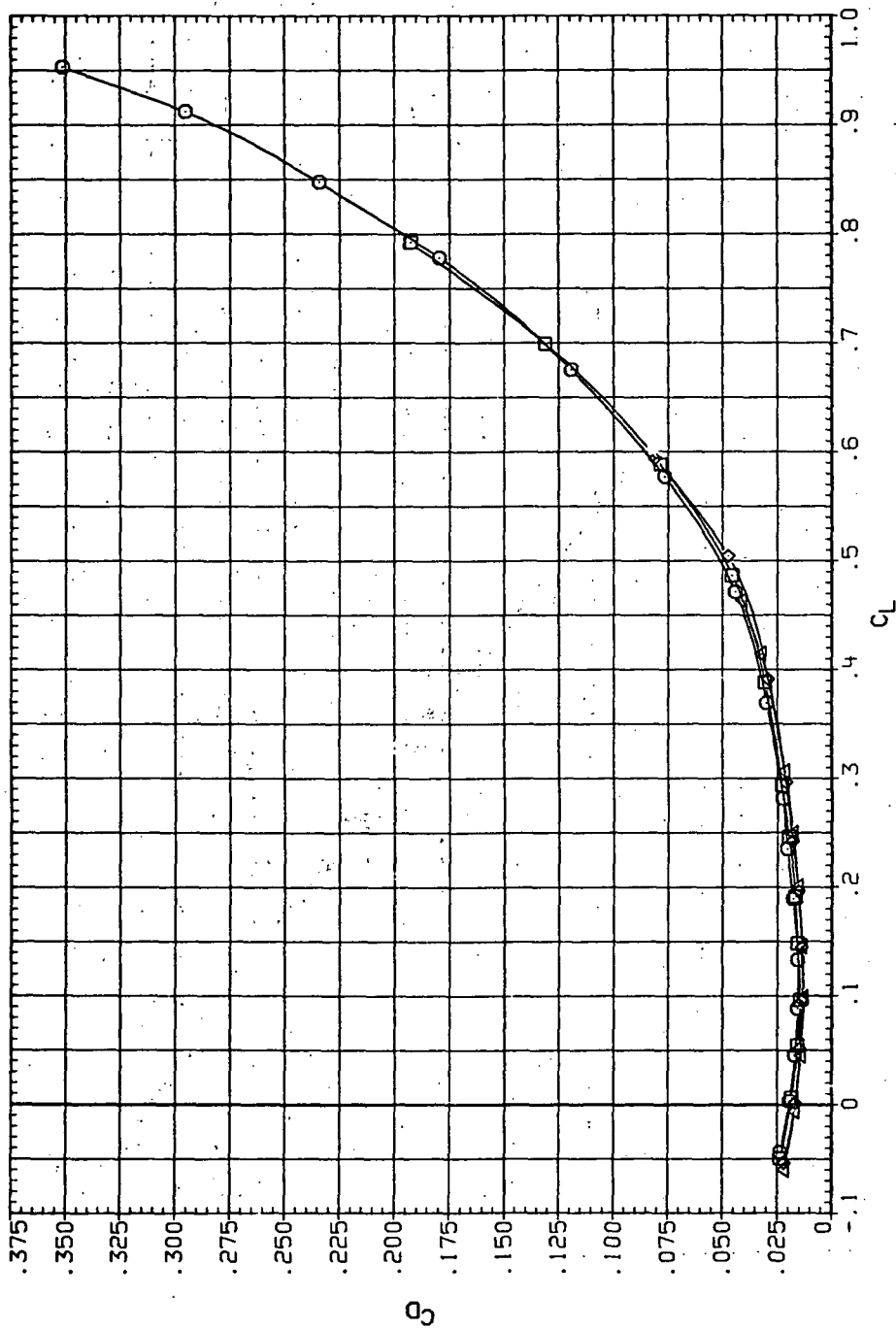


(a) C_L vs α .

Figure 18.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR019 □ 9450B (AL)
 RJR059 □ 9450B (AL)
 RJR099 □ 9450B (AL)
 RJR138 △ 9450B (AL)

RM/L QINS.
 3.280 5.810
 4.580 7.710
 6.230 10.600
 8.200 14.100

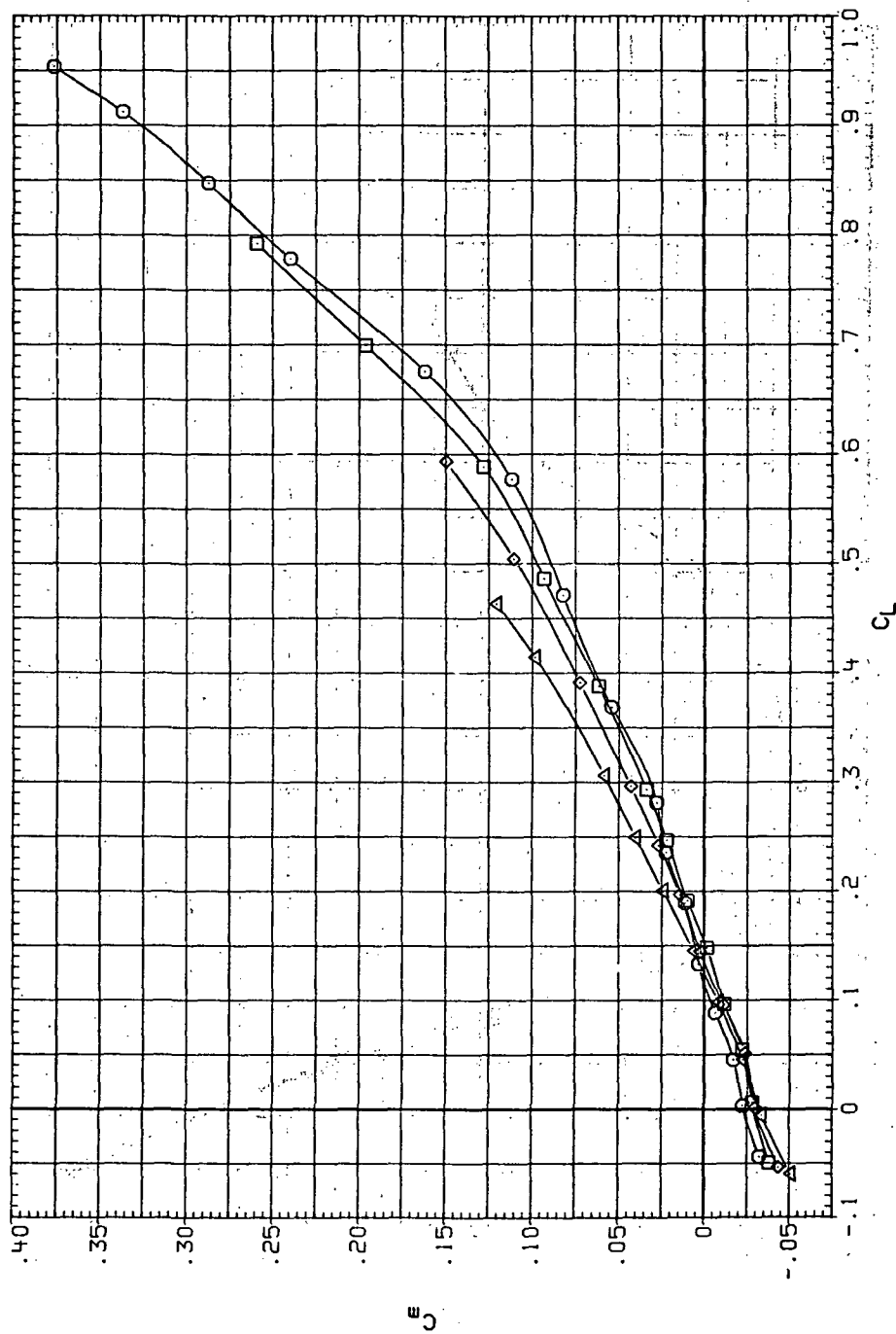


(b) C_D vs C_L .

Figure 18.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR019 9M505 (AL)
 RJR059 9M508 (AL)
 RJR099 9M508 (AL)
 RJR138 9M508 (AL)

RN/L Q (NSM)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

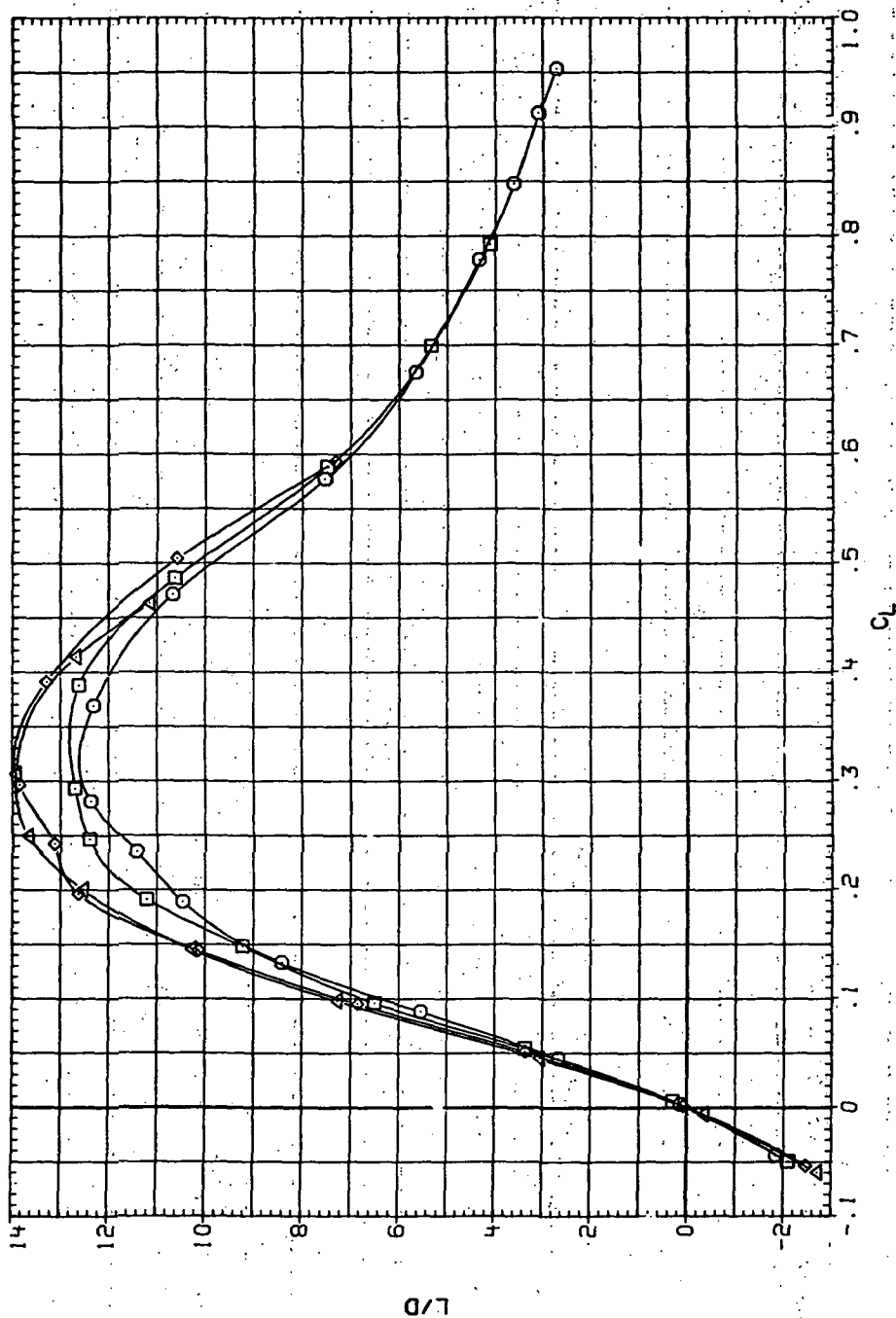


(c) C_m vs C_L

Figure 18.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR019 94508 (AL) $\square$
 RJR059 94508 (AL) $\square$
 RJR099 94508 (AL) $\square$
 RJR138 94508 (AL) $\square$

RV/L Q(NSM)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100



(d) L/D vs C_L

Figure 18.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR019 ○ 94508 (AL)
 RJR059 □ 94508 (AL)
 RJR099 ◇ 94508 (AL)
 RJR138 △ 94508 (AL)

RV/L Q(NSH)

3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

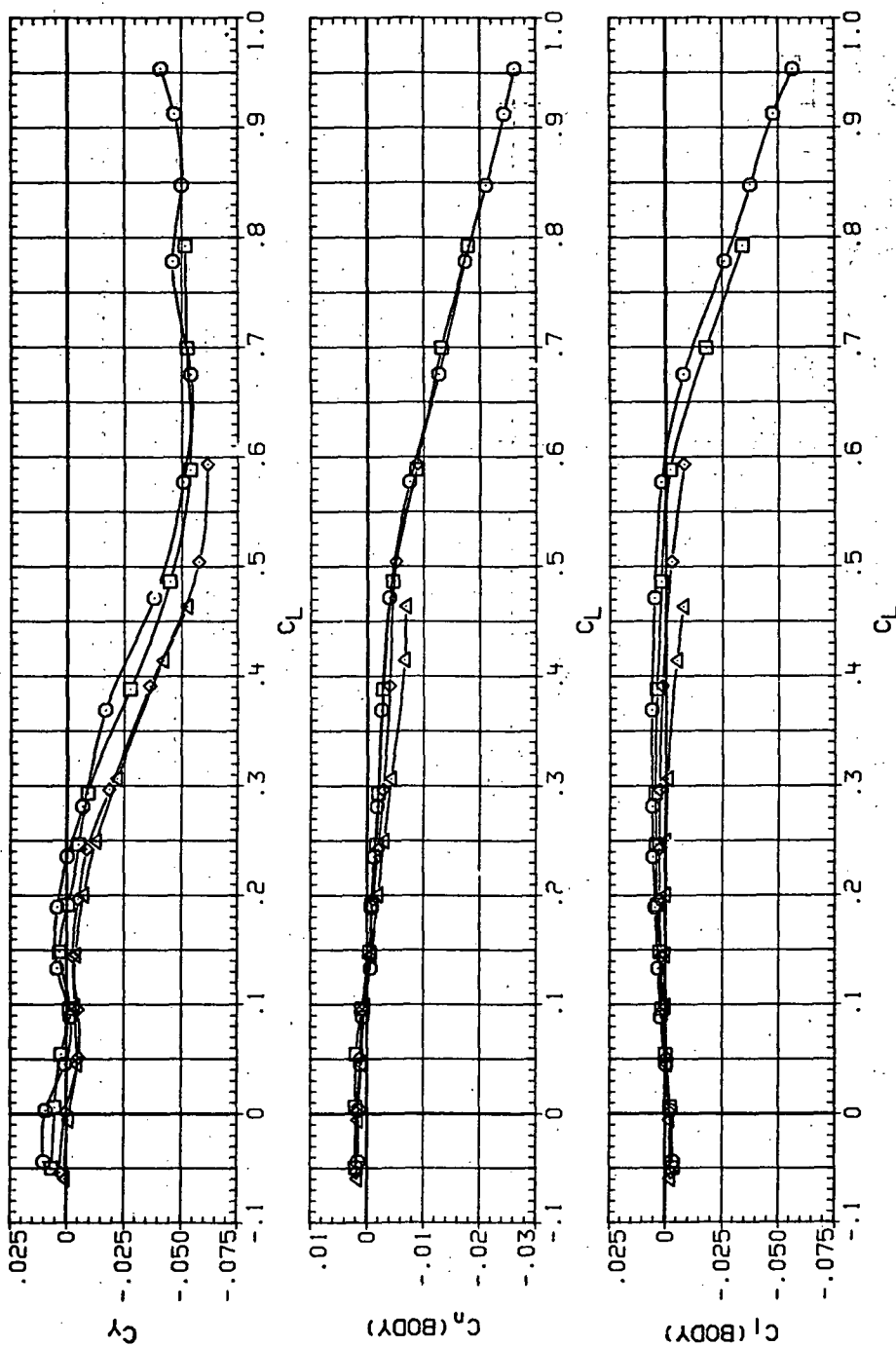
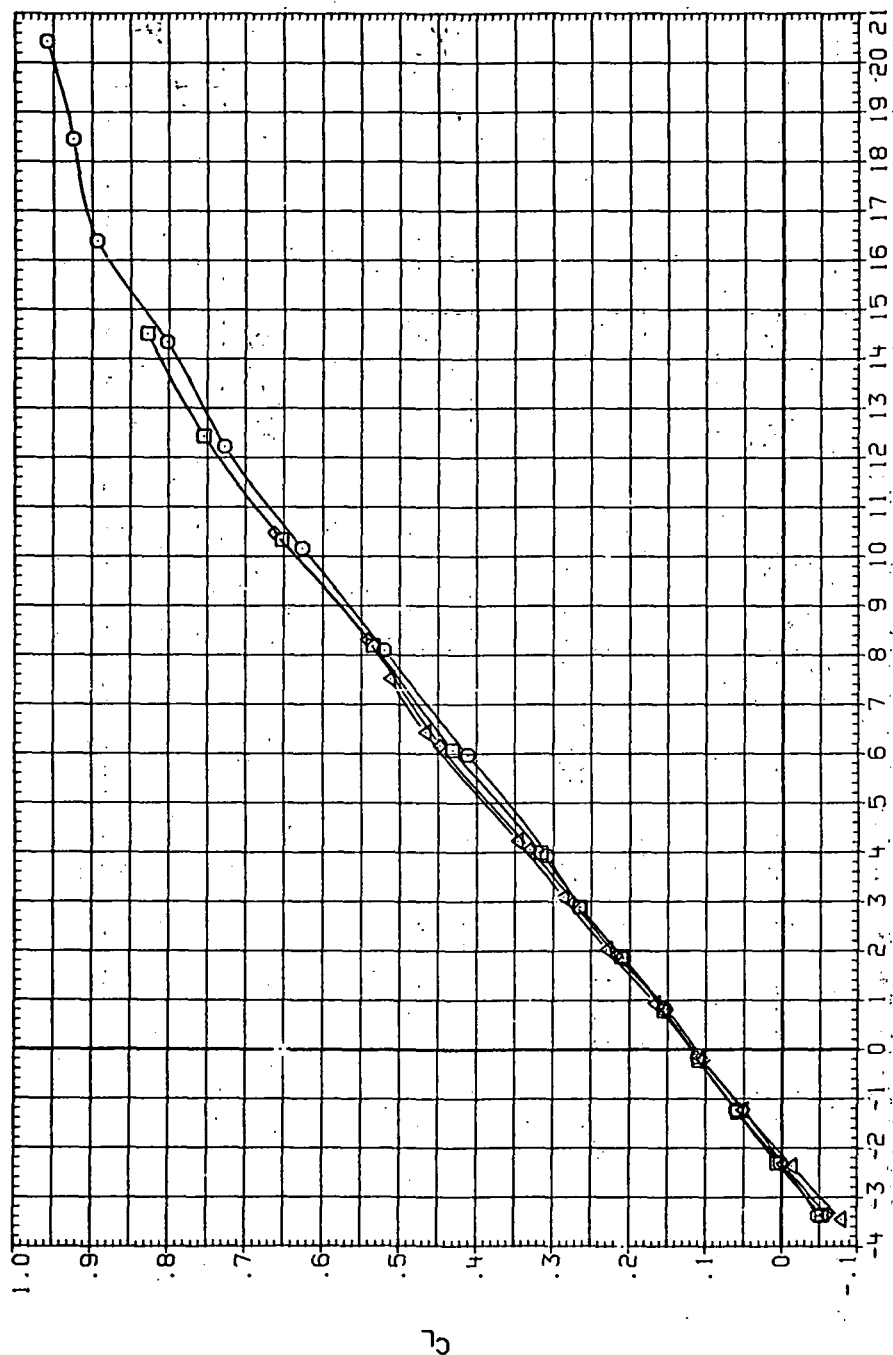
(e) C_Y , C_n and C_l vs C_L .

Figure 18.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RUP020 ○ SH50B (AL)
 RUP060 □ SH50B (AL)
 RUP100 △ SH50B (AL)
 RUP139 △ SH50B (AL)

RN/L Q(NSM)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

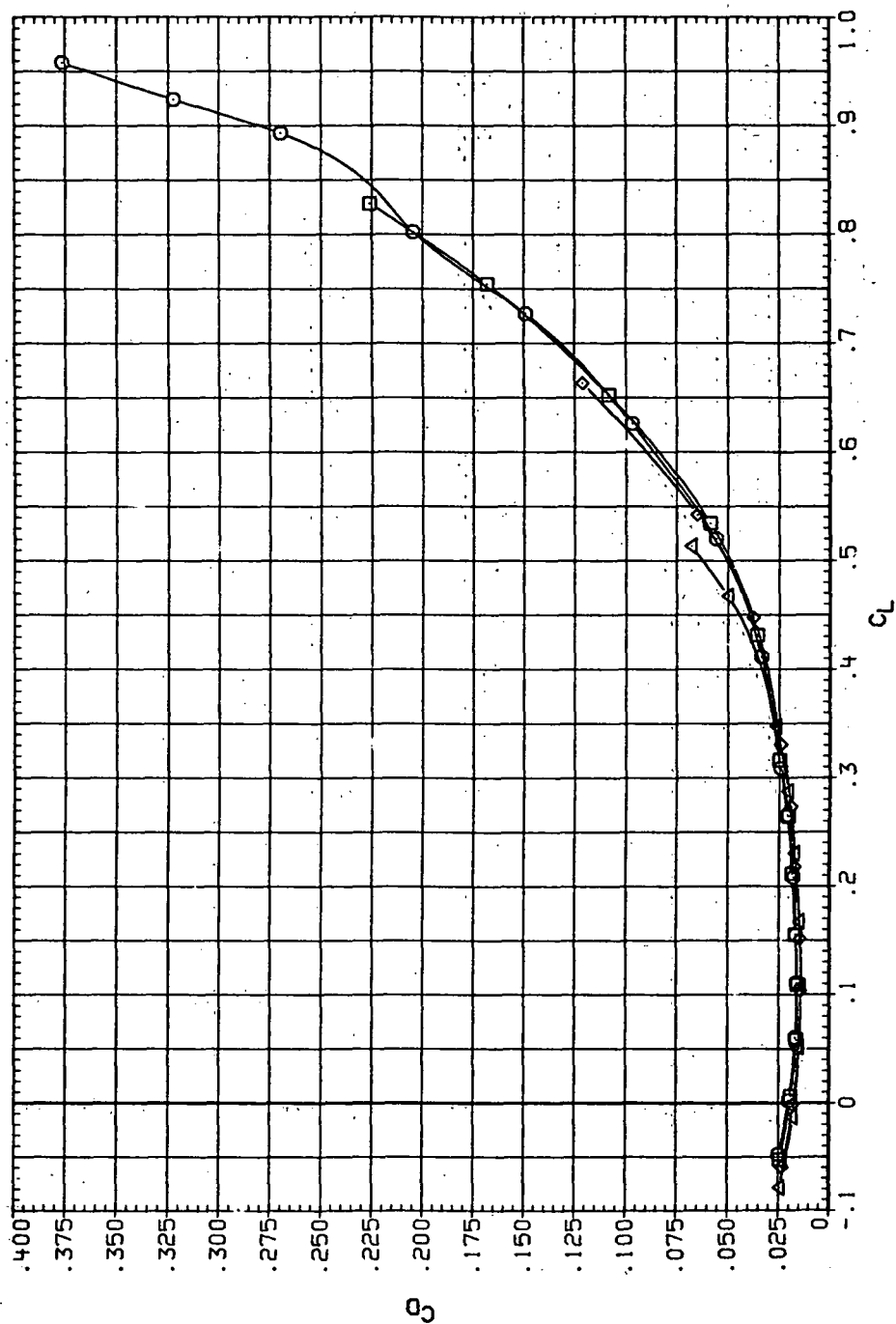


(a) C_L vs α .

Figure 19. Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.8$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR020 ○ 94508 (AL)
 RJR060 □ 94508 (AL)
 RJR100 ◇ 94508 (AL)
 RJR139 △ 94508 (AL)

RV/L Q (NEM)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

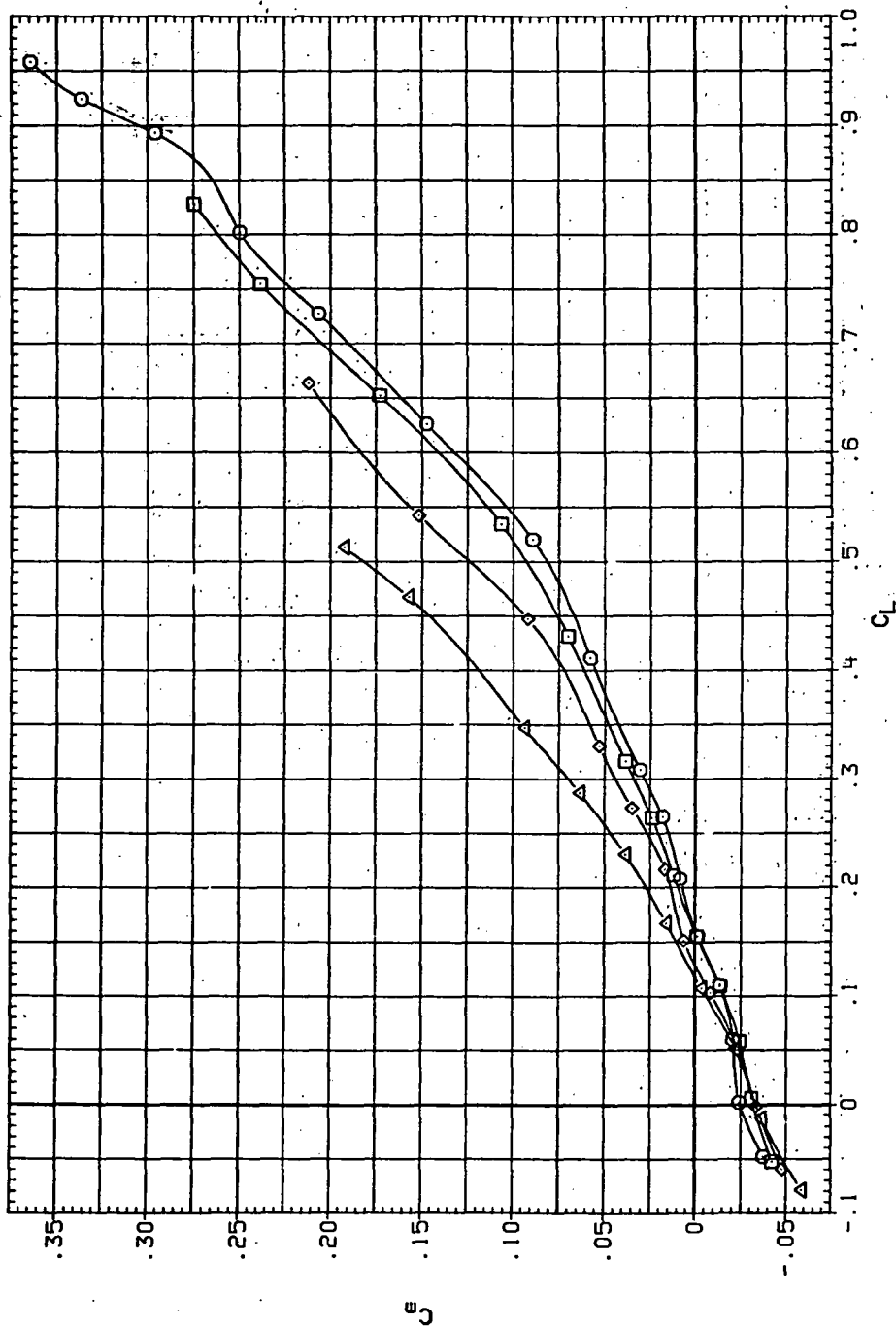


(b) C_D vs C_L .

Figure 19.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR020 $\square$ 9x508 (AL)
 RJR050 $\square$ 9x508 (AL)
 RJR100 $\diamond$ 9x508 (AL)
 RJR139 $\triangle$ 9x508 (AL)

RN/L Q(NSM)
 3.260 7.050
 4.260 9.720
 6.230 13.400
 8.200 17.800



(c) C_m vs C_L .

Figure 19.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR020 ○ 94508 (AL)
 RJR060 □ 94508 (AL)
 RJR100 ◇ 94508 (AL)
 RJR139 △ 94508 (AL)

RN/L 0 (NSM)

3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

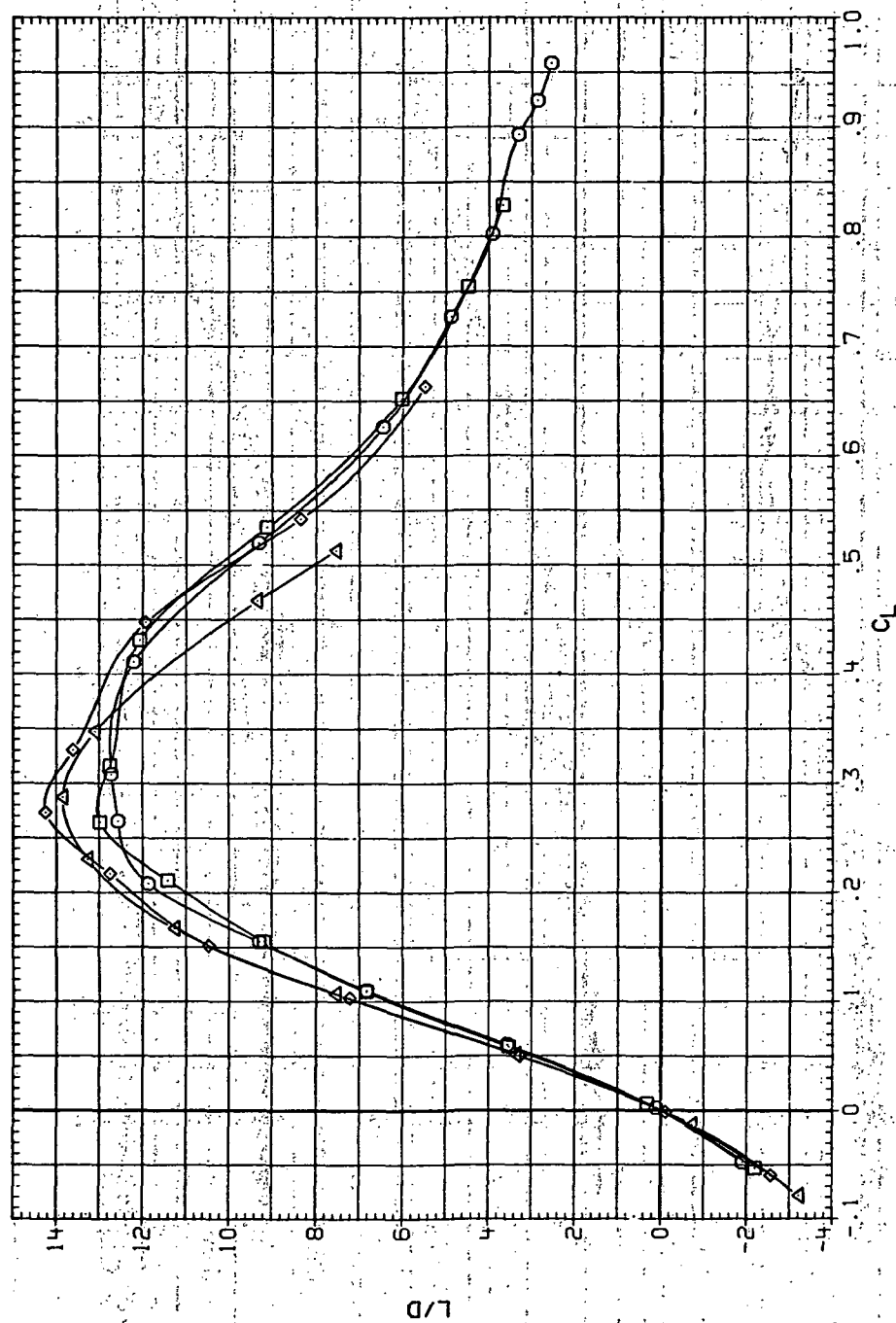
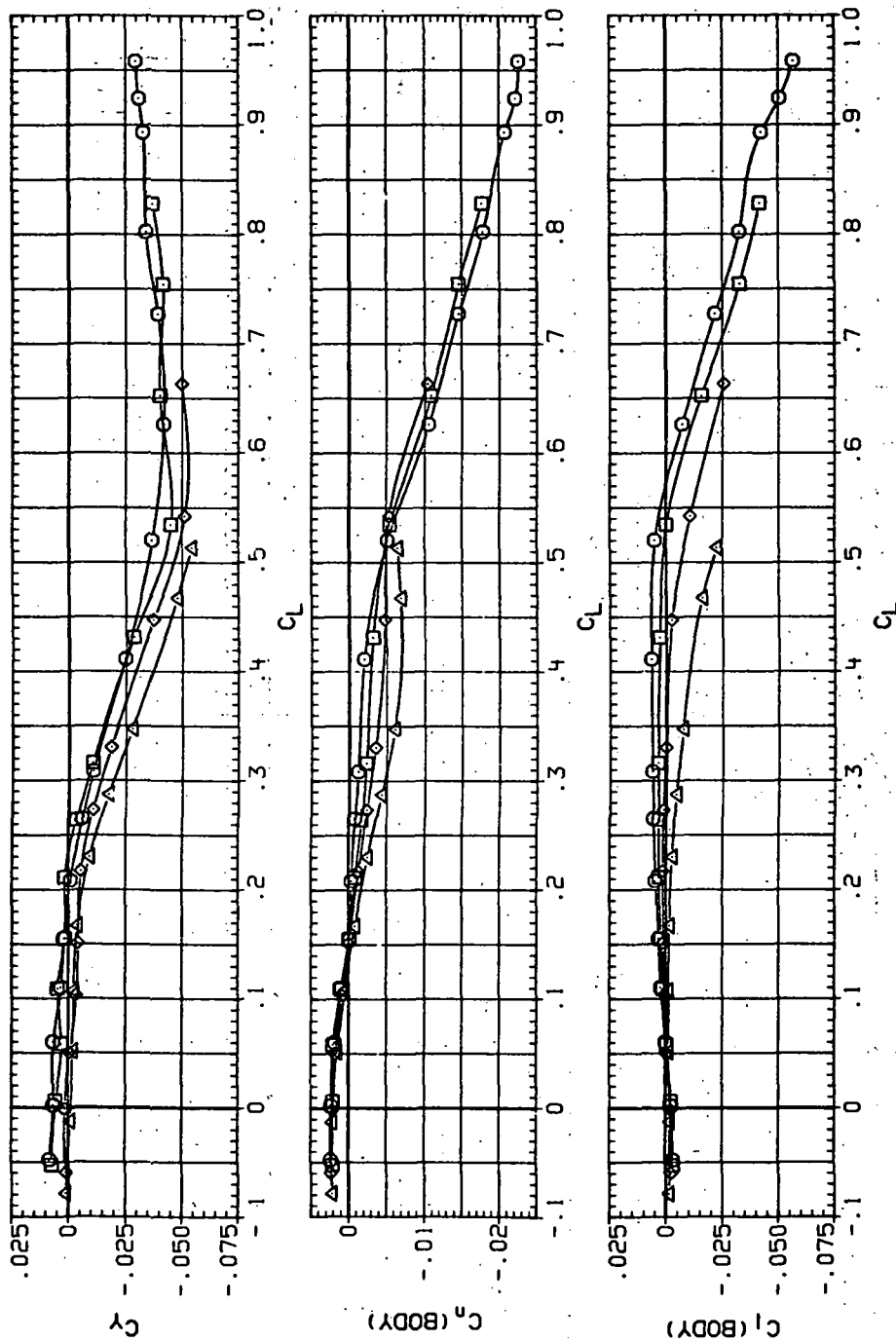
(d) L/D vs C_L

Figure 19 - Continued.

DATA SET SYMBOL CONFIGURATION

RJR020 ◻ 9M508 (AL)
 RJR050 ◻ 9M508 (AL)
 RJR100 ◻ 9M508 (AL)
 RJR139 ◻ 9M508 (AL)

RM/L Q/NSM
 3.280 7.060
 4.990 9.720
 6.230 13.400
 8.200 17.800



(e) C_Y , C_n and C_l vs C_L .

Figure 19. — Concluded.

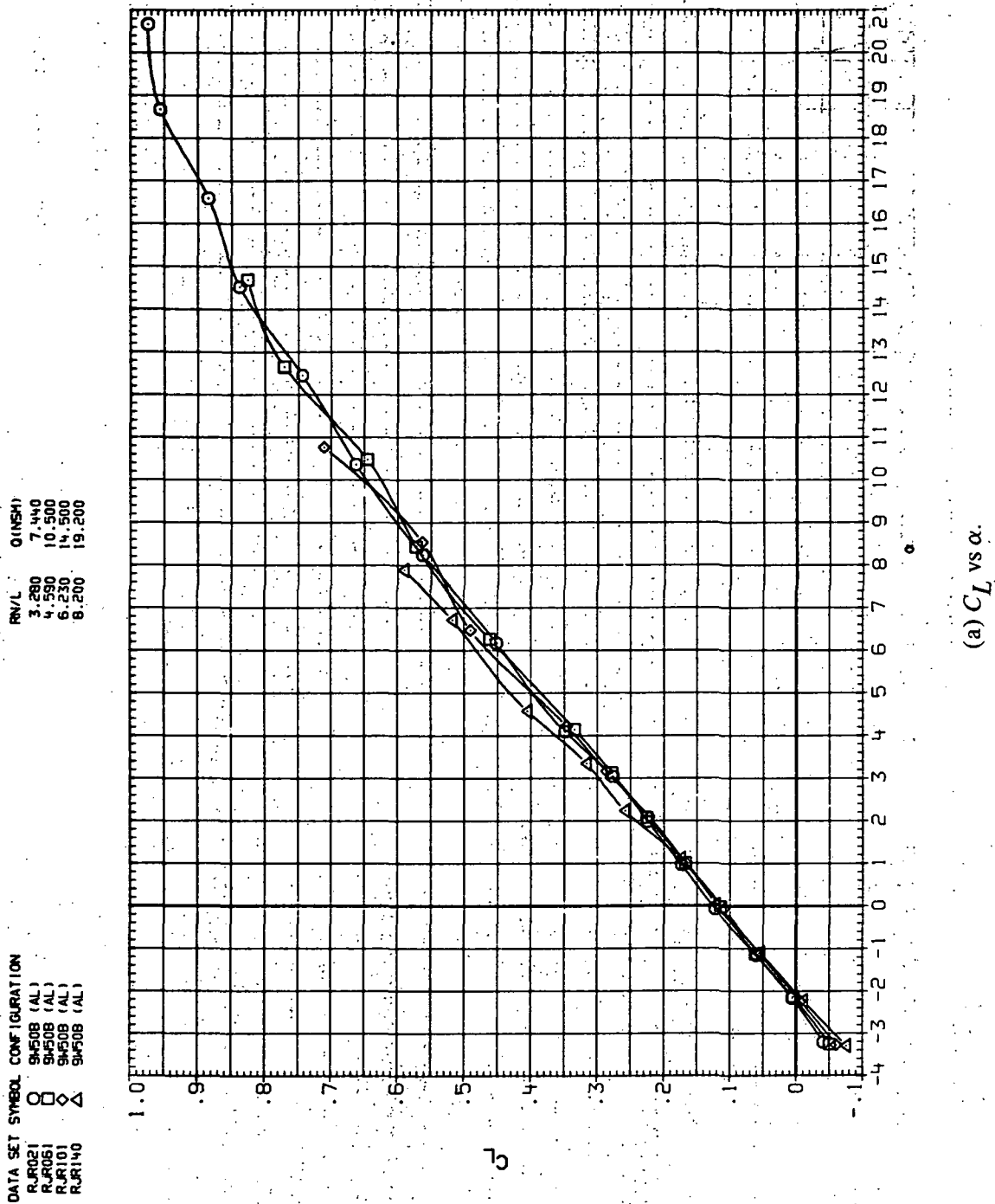
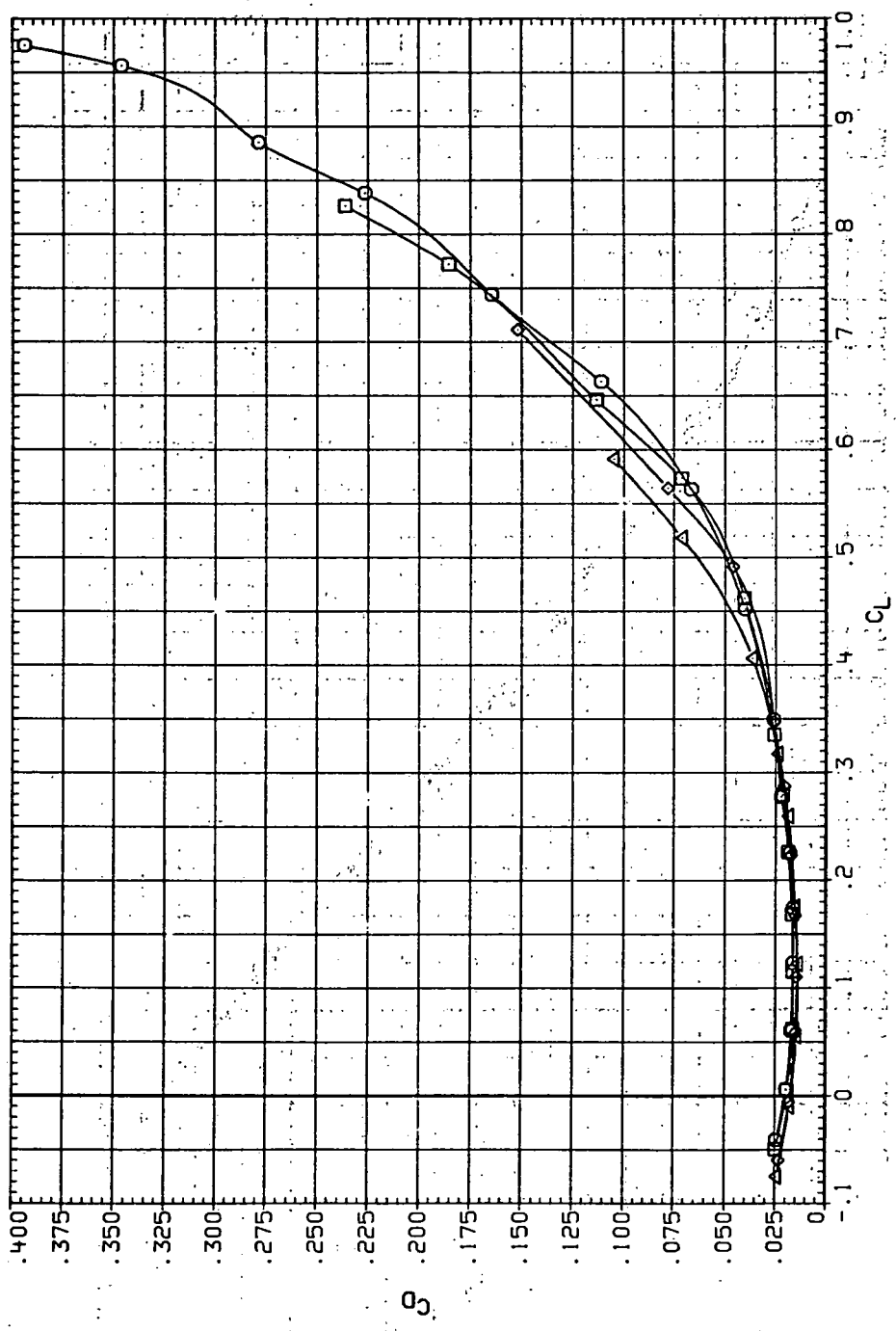


Figure 20.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.9$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION

RJR021	○	94508 (AL)
RJR051	◻	94508 (AL)
RJR101	◻	94508 (AL)
RJR140	△	94508 (AL)

PN/L	Q(NSH)
3.280	7.440
4.590	10.500
6.230	14.500
8.200	19.200

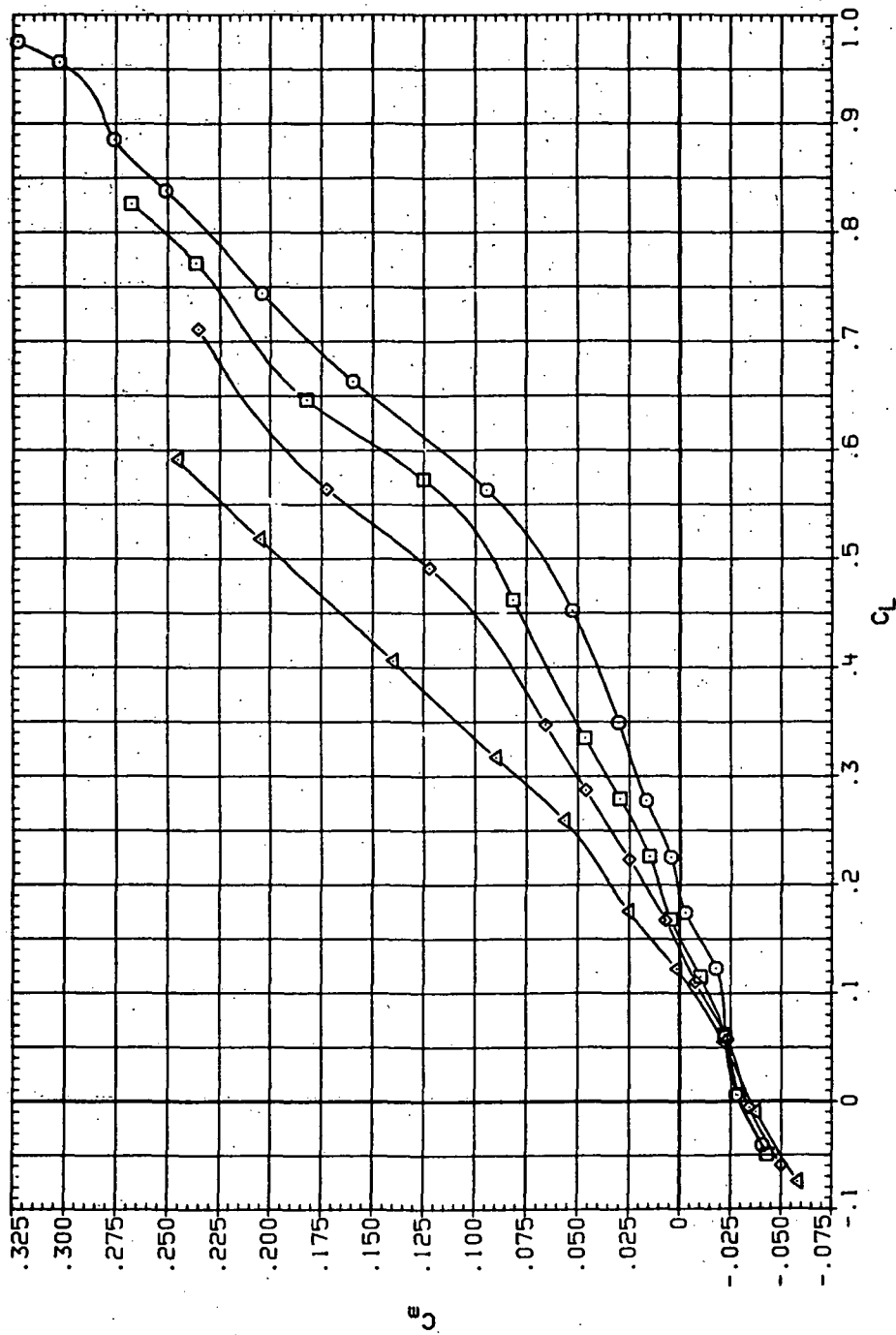


(b) C_D vs C_L

Figure 20. — Continued.

DATA SET SYMBOL CONFIGURATION
 R.JR021 $\square$ 5M508 (AL)
 R.JR051 $\square$ 5M508 (AL)
 R.JR101 $\diamond$ 5M508 (AL)
 R.JR140 $\triangle$ 5M508 (AL)

RM/L Q (NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

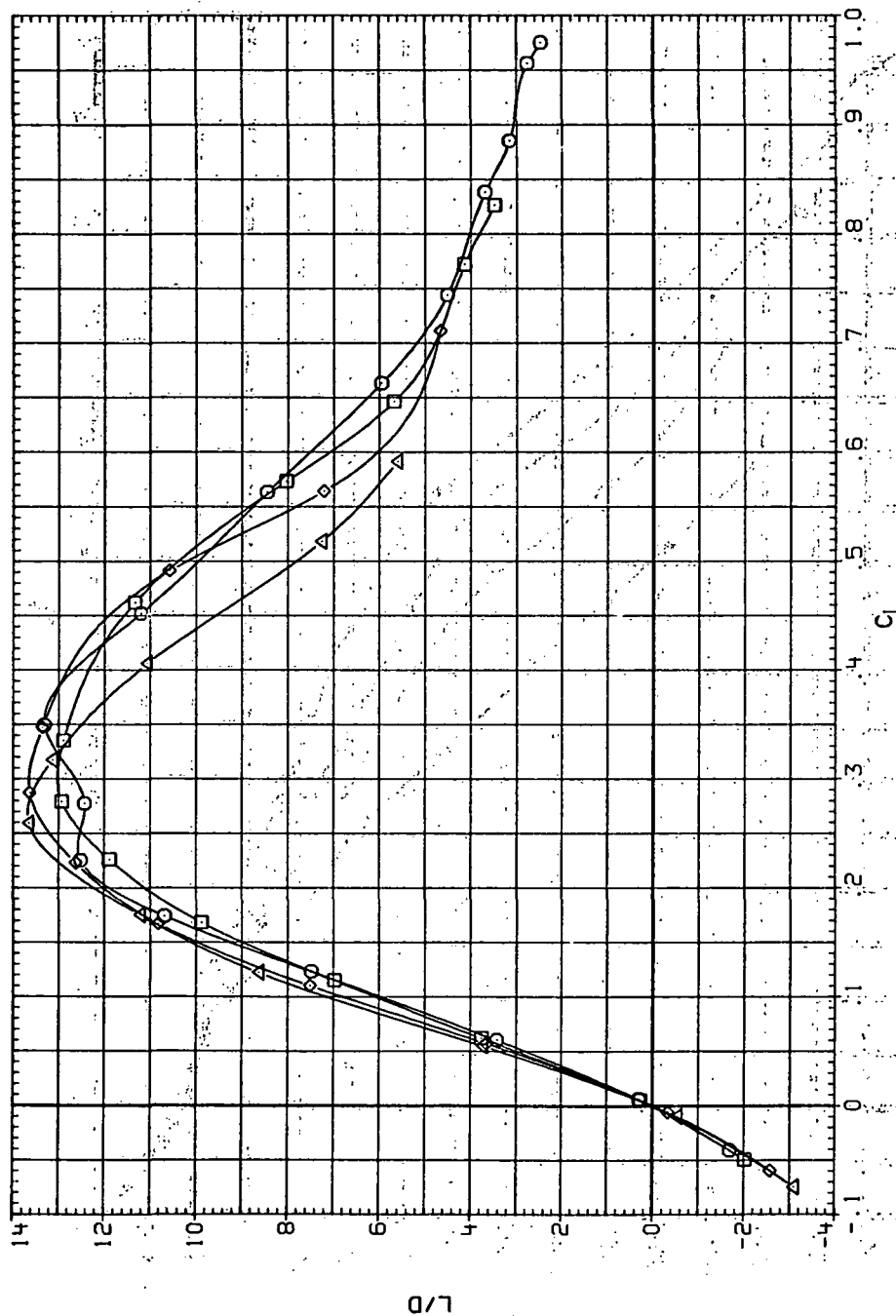


(c) C_m vs C_L .

Figure 20.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR021 ○ 9450B (AL)
 RJR061 □ 9450B (AL)
 RJR101 ◇ 9450B (AL)
 RJR140 △ 9450B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200



(d) L/D vs C_L .

Figure 20.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR021 ○ 94508 (AL)
 RJR051 □ 94508 (AL)
 RJR101 ◇ 94508 (AL)
 RJR140 △ 94508 (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

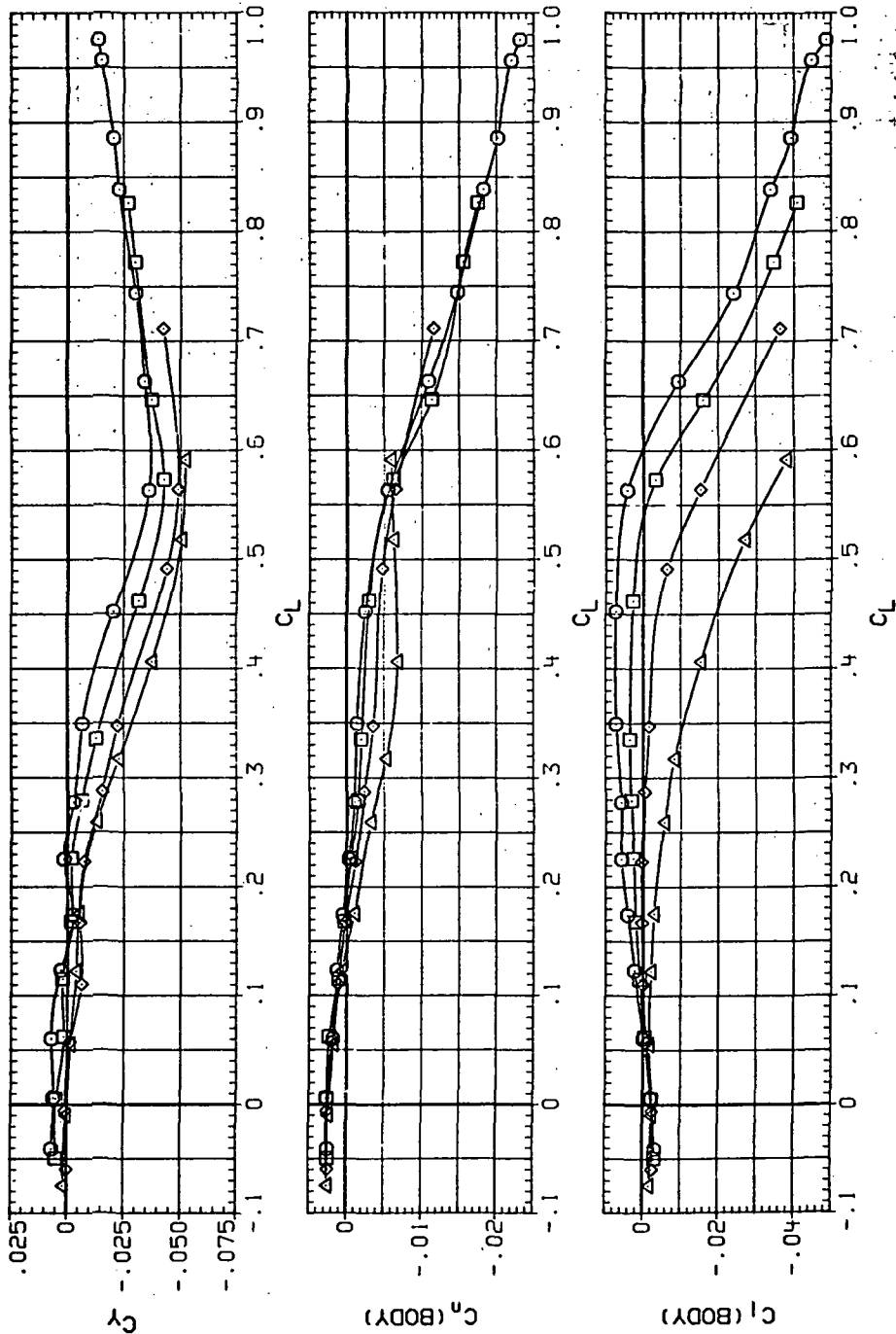
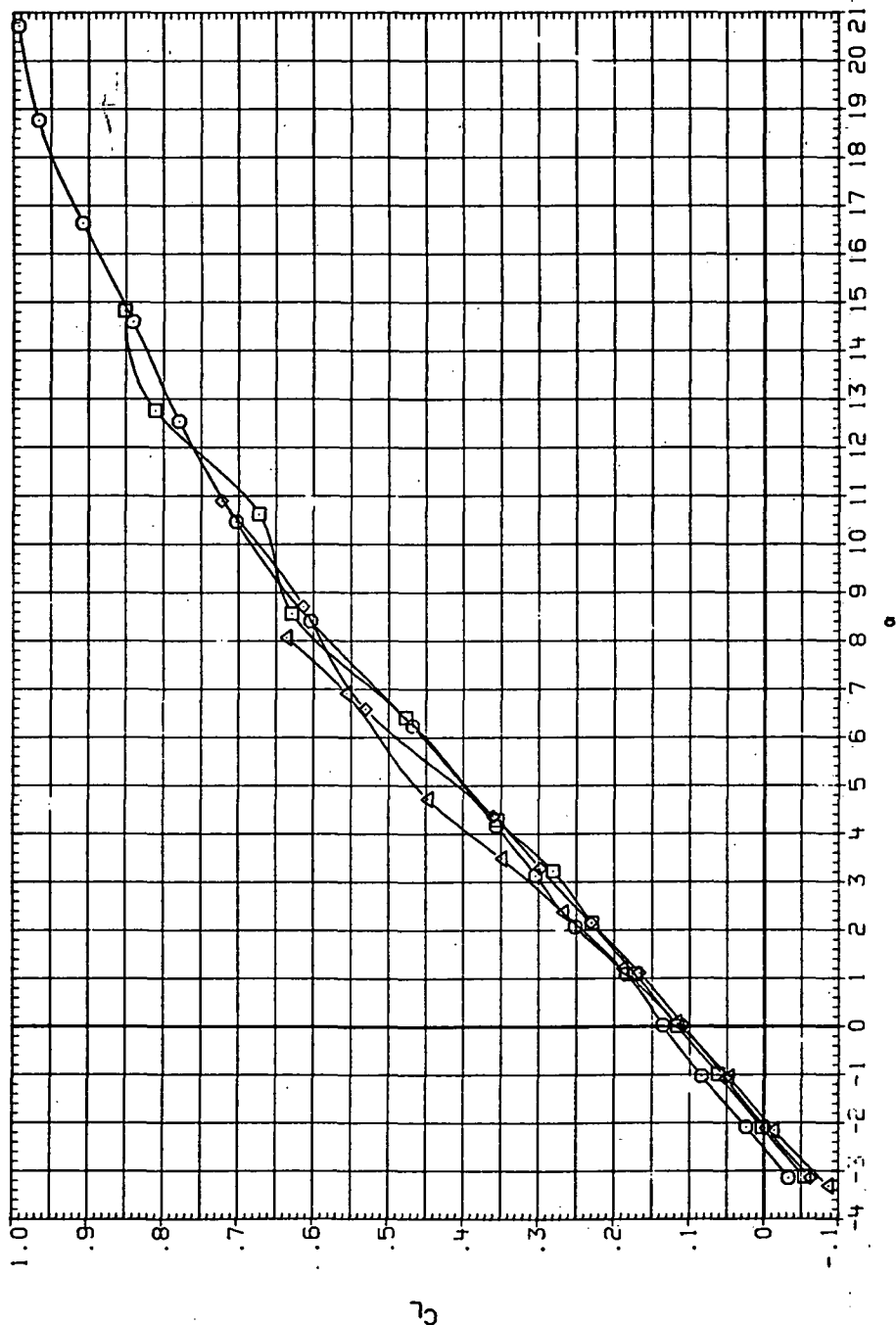
(e) C_Y , C_n and C_l vs C_L .

Figure 20.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR022 9450B (AL)
 RJR062 9450B (AL)
 RJR102 9450B (AL)
 RJR141 9450B (AL)

RN/L Q/NSH
 3.260 7.950
 4.590 10.900
 6.230 15.000
 8.200 19.900

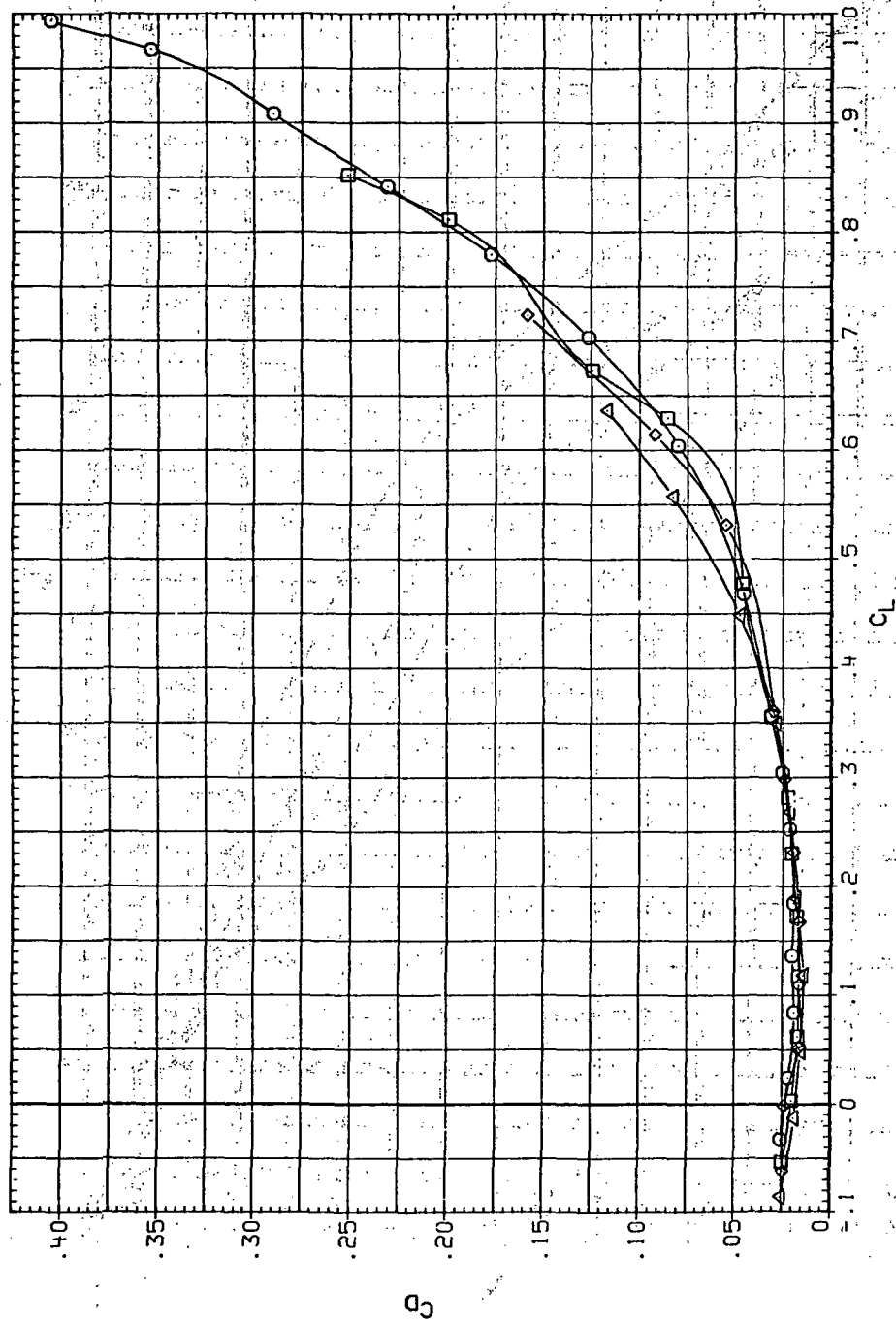


(a) C_L vs α .

Figure 21.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.95$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR022 $\square$ 9M50B (AL)
 RJR052 $\square$ 9M50B (AL)
 RJR102 $\square$ 9M50B (AL)
 RJR141 $\square$ 9M50B (AL)

PM/L Q (NEM)
 3.280 7.950
 4.590 10.900
 6.230 15.000
 8.200 19.900

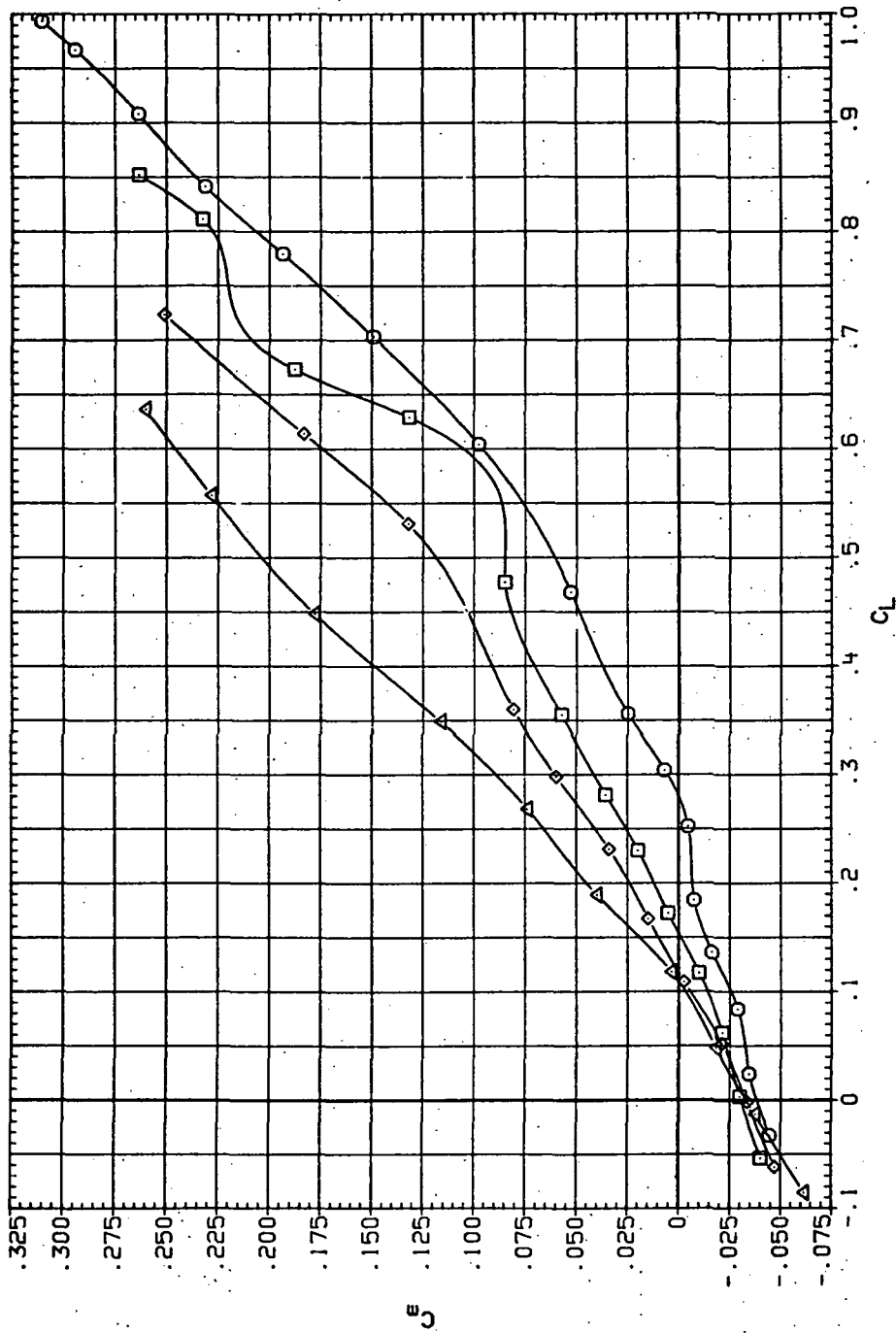


(b) C_D vs C_L .

Figure 21. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR022 ○ 94508 (AL)
 RJR062 □ 94508 (AL)
 RJR102 ◇ 94508 (AL)
 RJR141 △ 94508 (AL)

RN/L Q(NSH)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

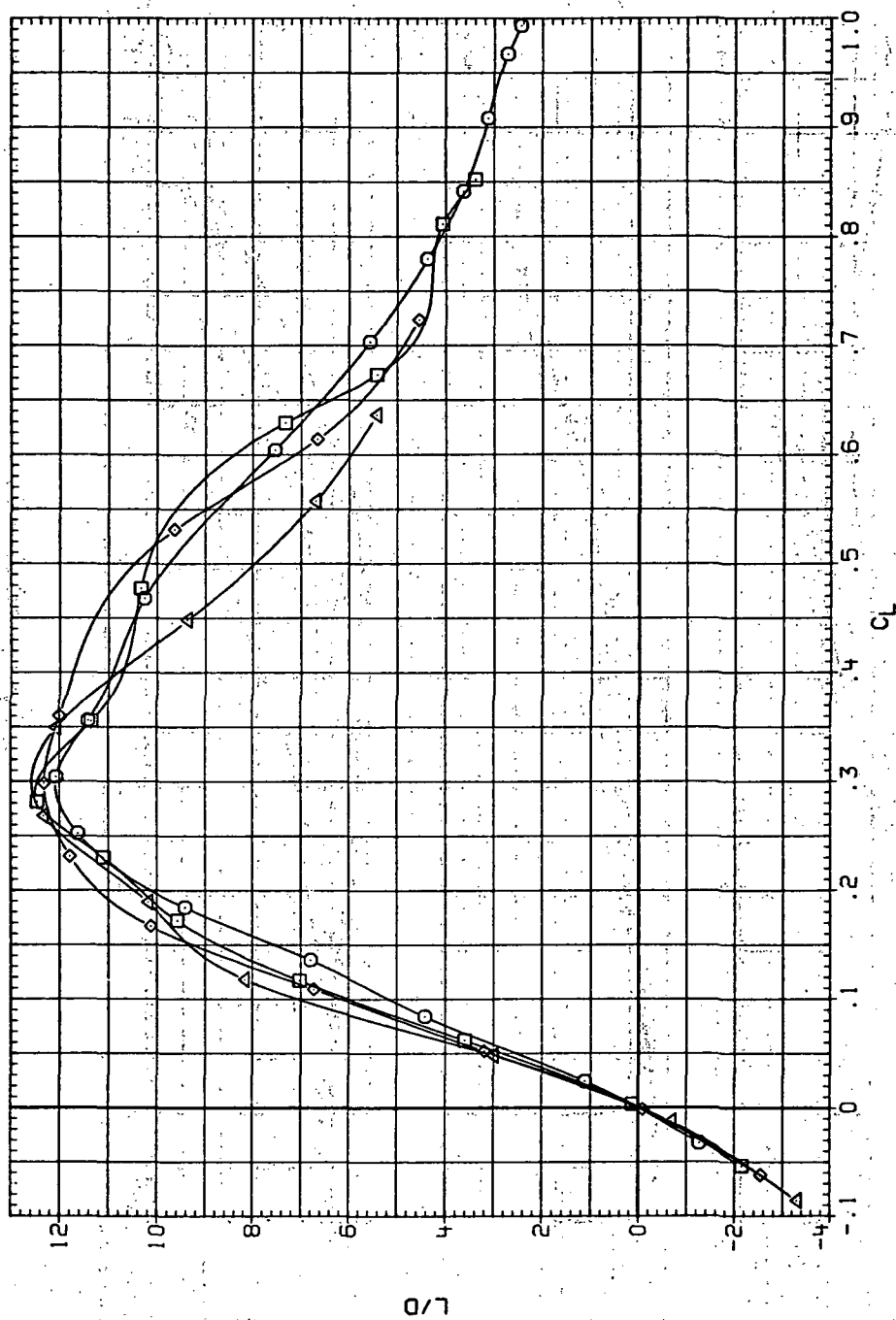


(c) C_m vs C_L

Figure 21.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR022 ○ 9M50B (AL)
 RJR062 □ 9M50B (AL)
 RJR102 ◇ 9M50B (AL)
 RJR141 △ 9M50B (AL)

RM/L Q(NSM)
 3.260 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900



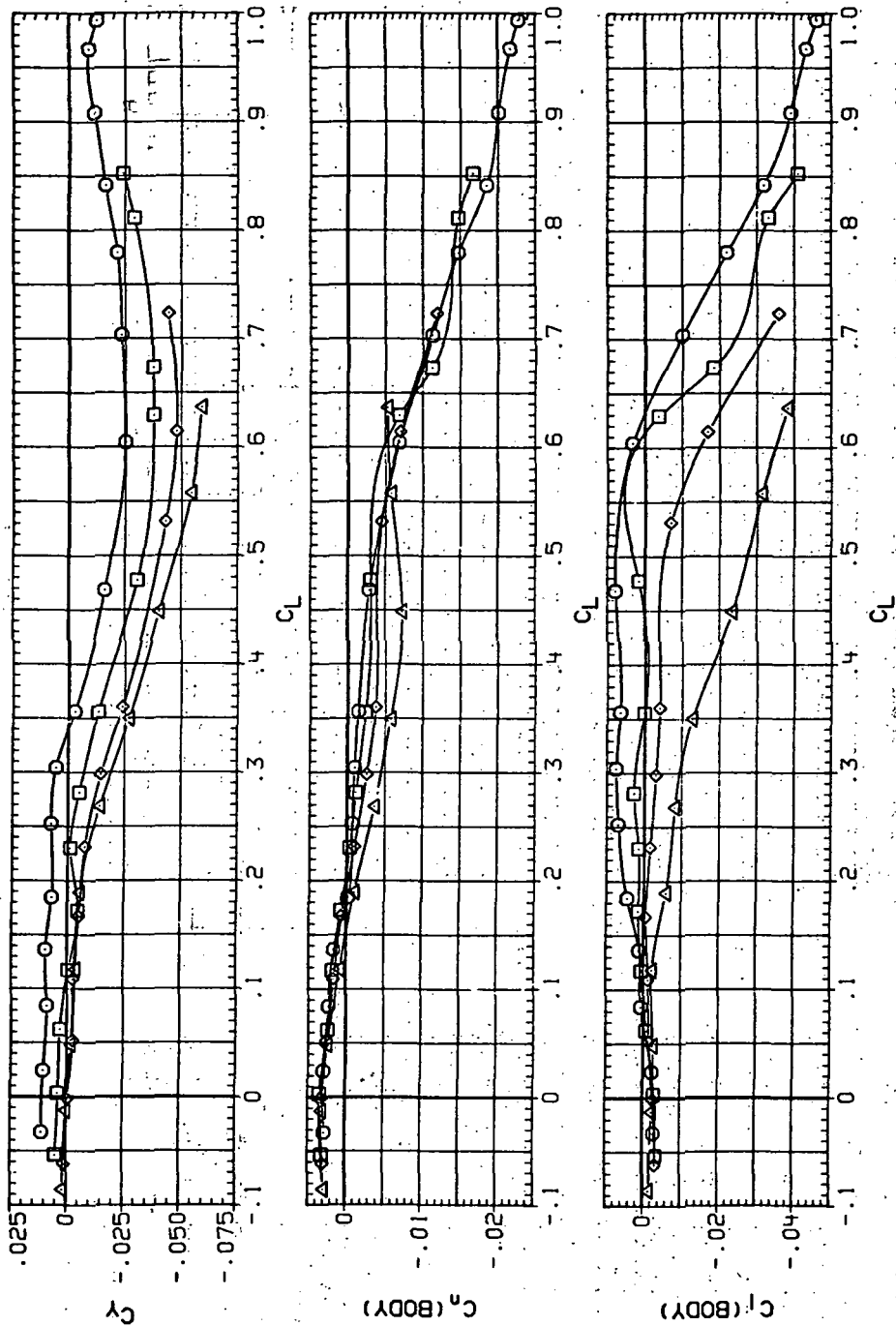
(d) L/D vs C_L .

Figure 21. - Continued.

DATA SET SYMBOL CONFIGURATION

RJR022 ○ 9M508 (AL)
 RJR052 □ 9M508 (AL)
 RJR102 ◇ 9M508 (AL)
 RJR141 △ 9M508 (AL)

RN/L Q(NSM)
 3.280 7.950
 4.590 10.900
 6.230 15.000
 8.200 19.900



(e) C_Y , C_n and C_q vs C_L

Figure 21.— Concluded.

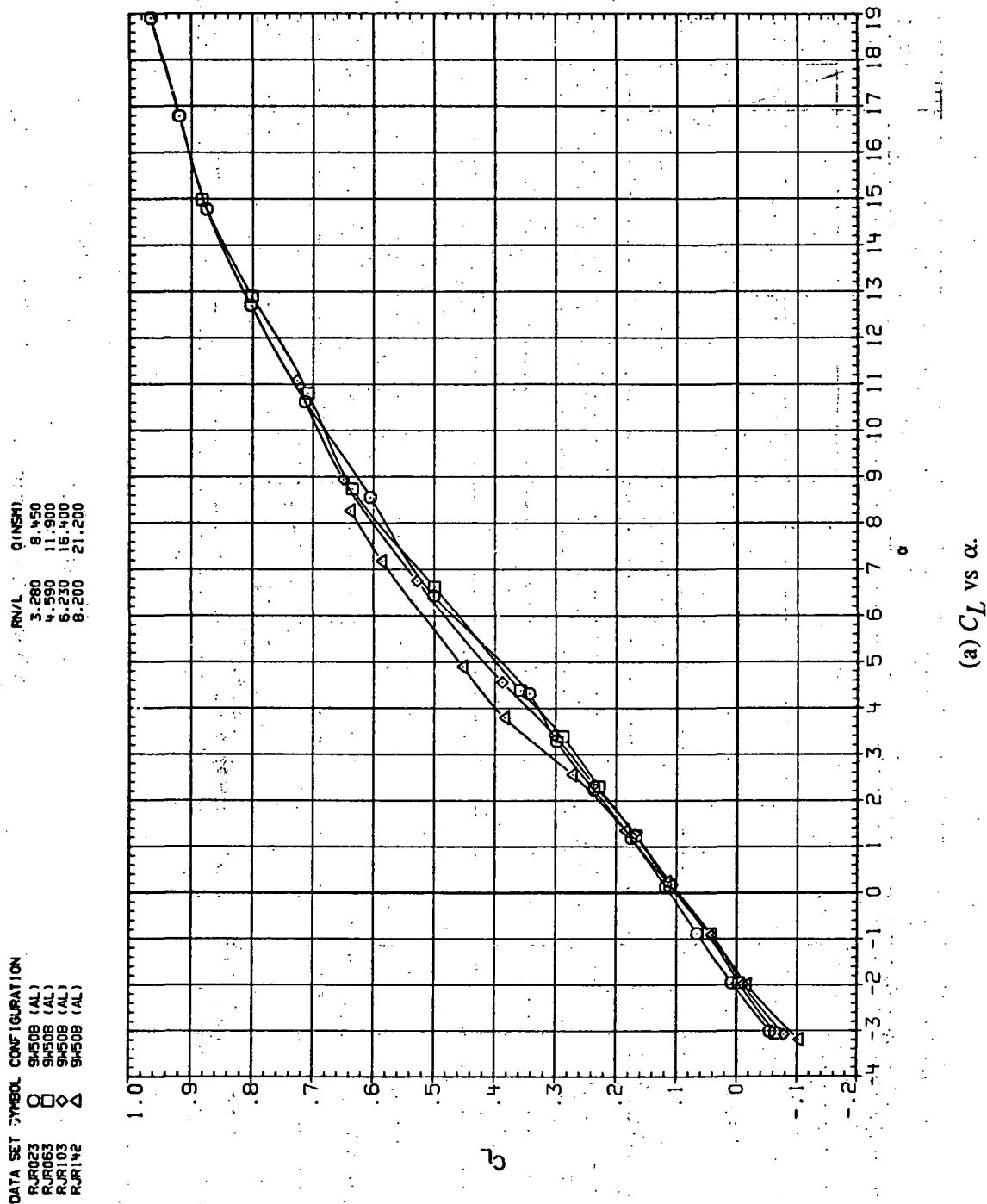
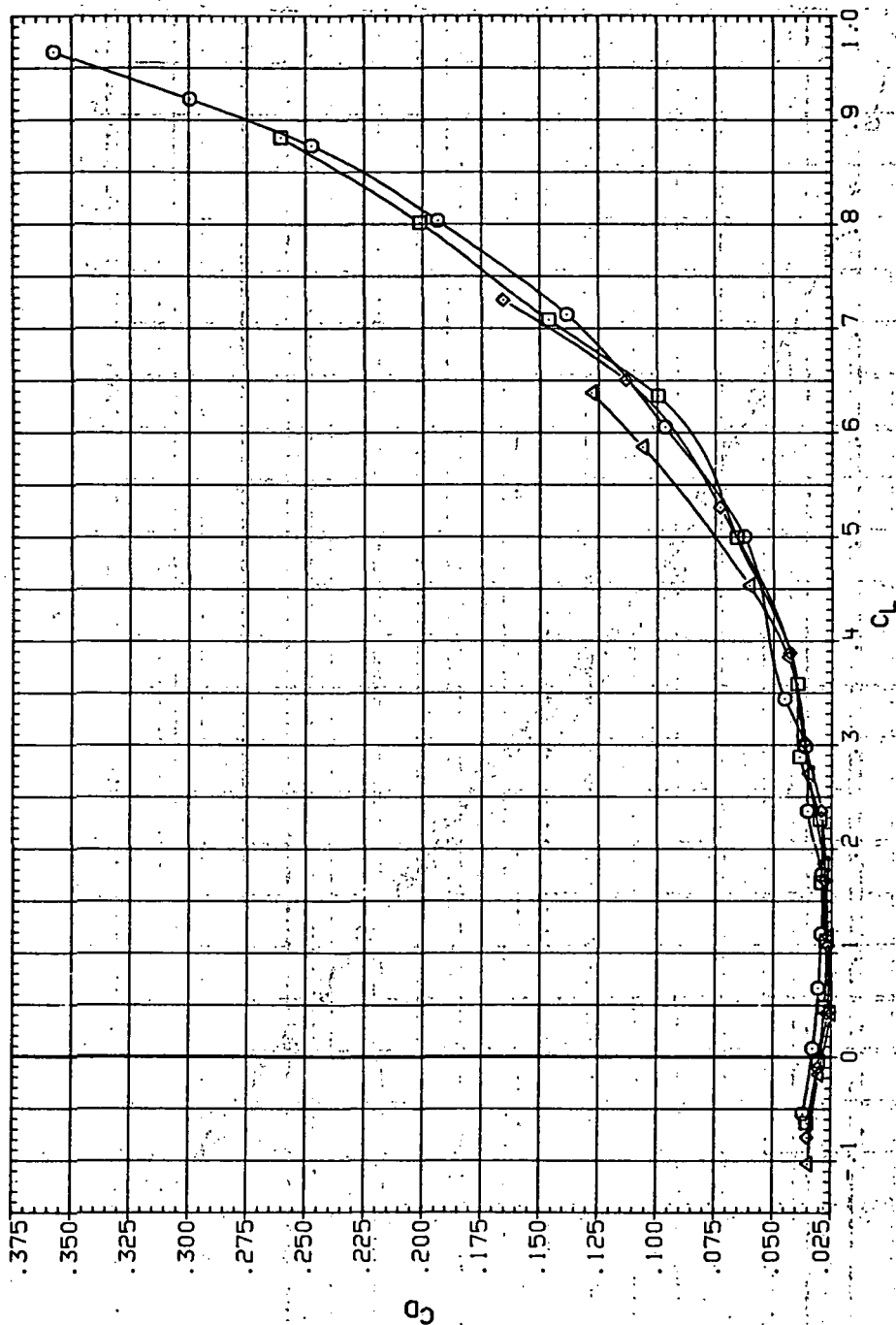


Figure 22.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.1$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR023 94508 (AL)
 RJR053 94508 (AL)
 RJR103 94508 (AL)
 RJR142 94508 (AL)

RN/L QINSH
 3.260 8.450
 4.580 11.900
 6.230 16.400
 8.200 21.200

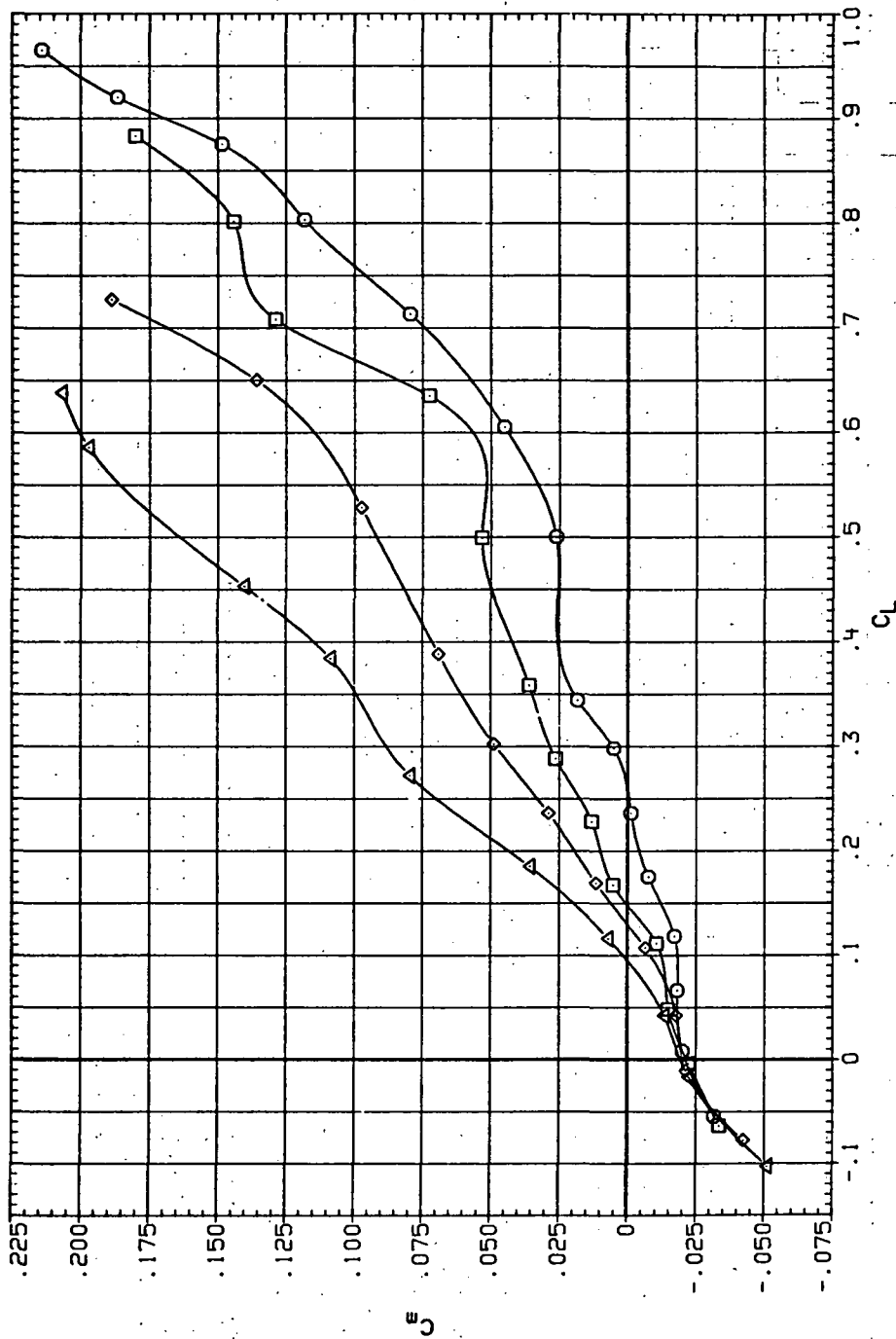


(b) C_D vs C_L

Figure 22. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUP023 $\square$ 9H50B (AL)
 RUP063 $\square$ 9H50B (AL)
 RUP103 $\diamond$ 9H50B (AL)
 RUP142 $\triangle$ 9H50B (AL)

RN/L Q(NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

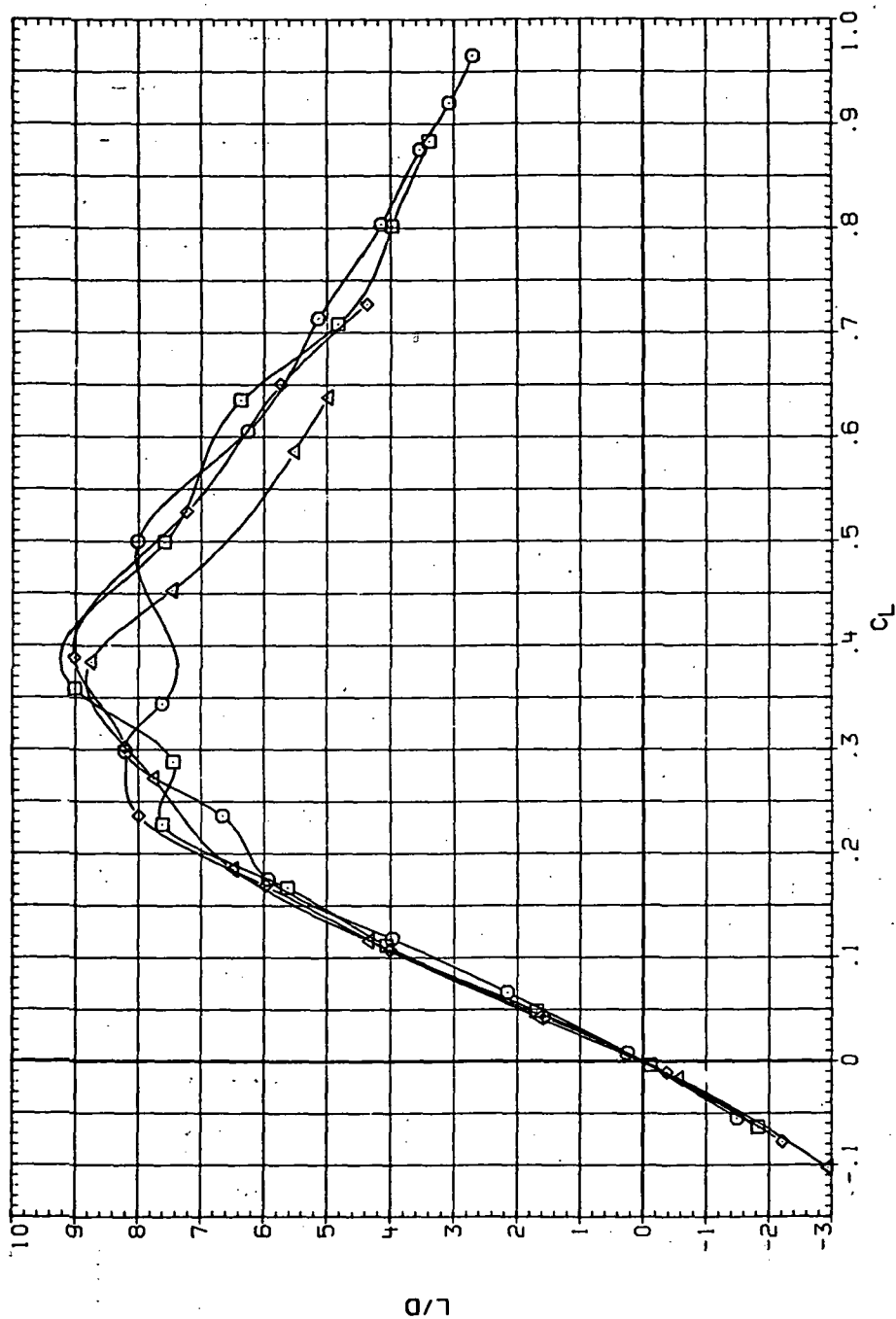


(c) C_m vs C_L .

Figure 22.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR023 9450B (AL)
 RJR063 9450B (AL)
 RJR103 9450B (AL)
 RJR142 9450B (AL)

RN/L Q(NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200



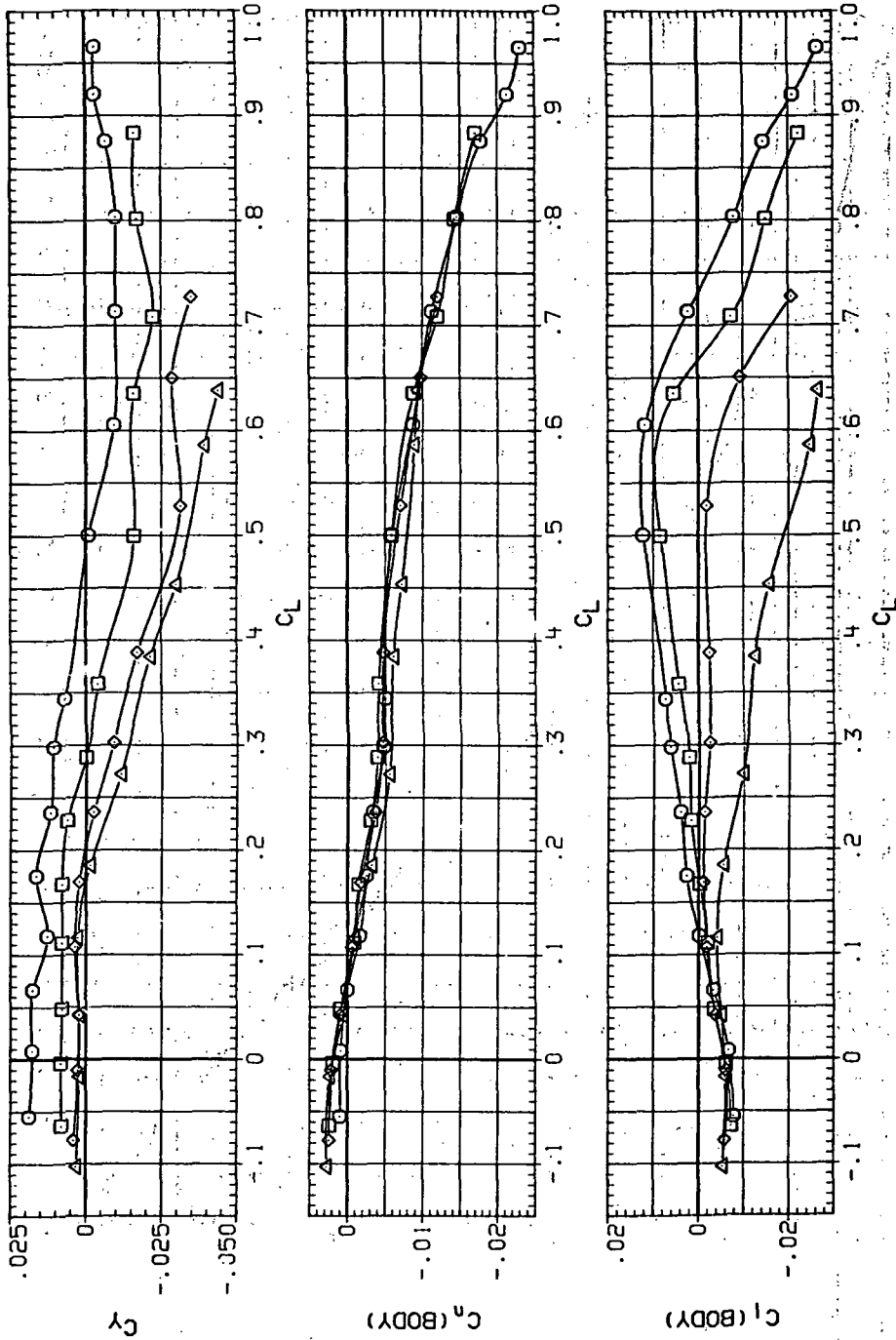
(d) L/D vs C_L .

Figure 22.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR023 9450B (AL)
 RJR063 9450B (AL)
 RJR103 9450B (AL)
 RJR142 9450B (AL)

RN/L Q (NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

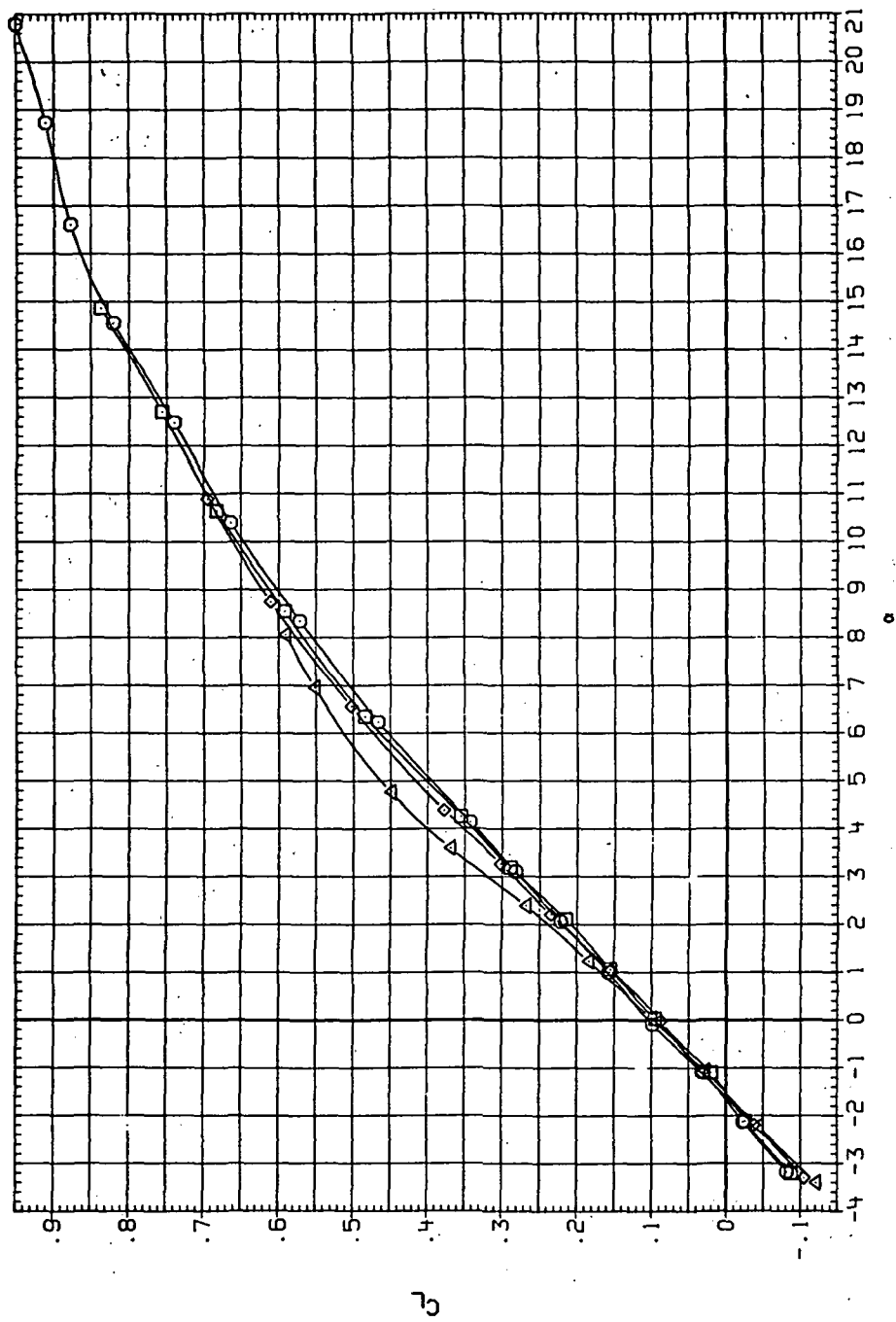


(e) C_y , C_n and C_l vs C_L .

Figure 22. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR024 9450B (AL)
 RJR054 9450B (AL)
 RJR104 9450B (AL)
 RJR143 9450B (AL)

RN/L Q (NSH)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800

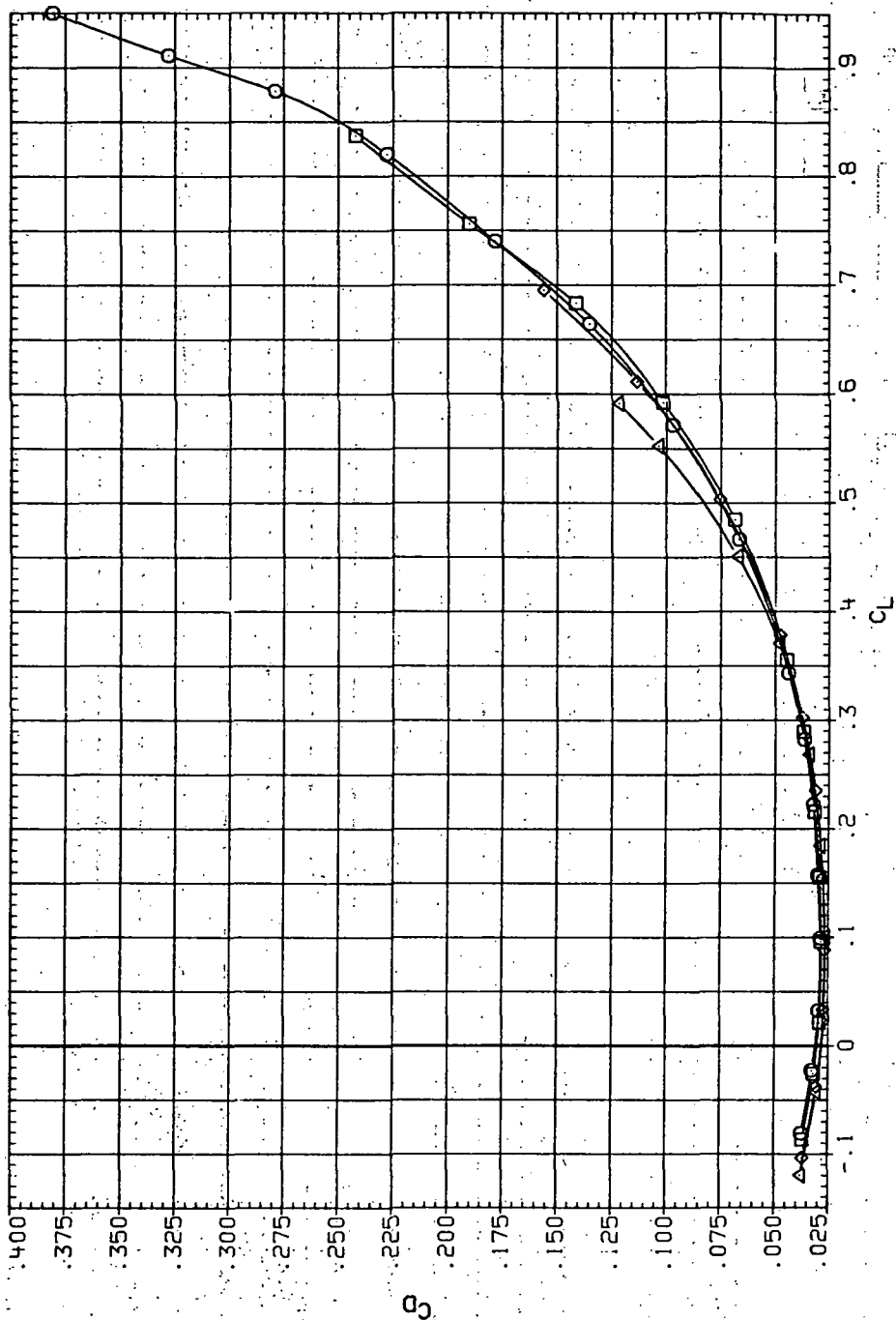


(a) C_L vs α .

Figure 23.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.2$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RU0024 ○ SM50B (AL)
 RU0054 □ SM50B (AL)
 RU0104 ◇ SM50B (AL)
 RU0143 △ SM50B (AL)

RV/L Q(NSH)
 3.280 8.98C
 4.590 12.400
 6.230 17.000
 8.200 22.800

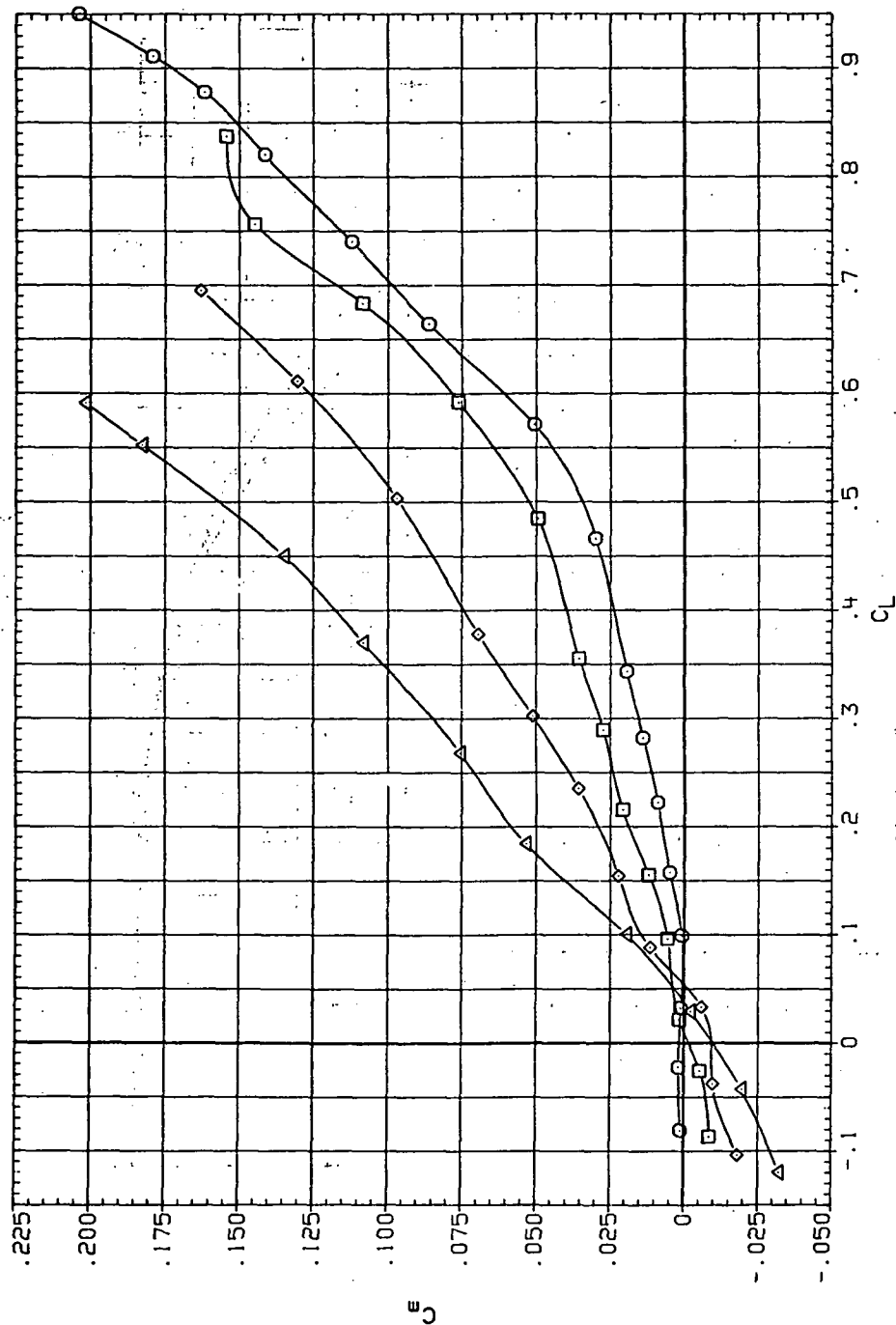


(b) C_D vs C_L .

Figure 23.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR024 ○ SM50B (AL)
 RJR064 □ SM50B (AL)
 RJR104 ◇ SM50B (AL)
 RJR143 △ SM50B (AL)

RM/L Q(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



(c) C_m vs C_L

Figure 23.— Continued.

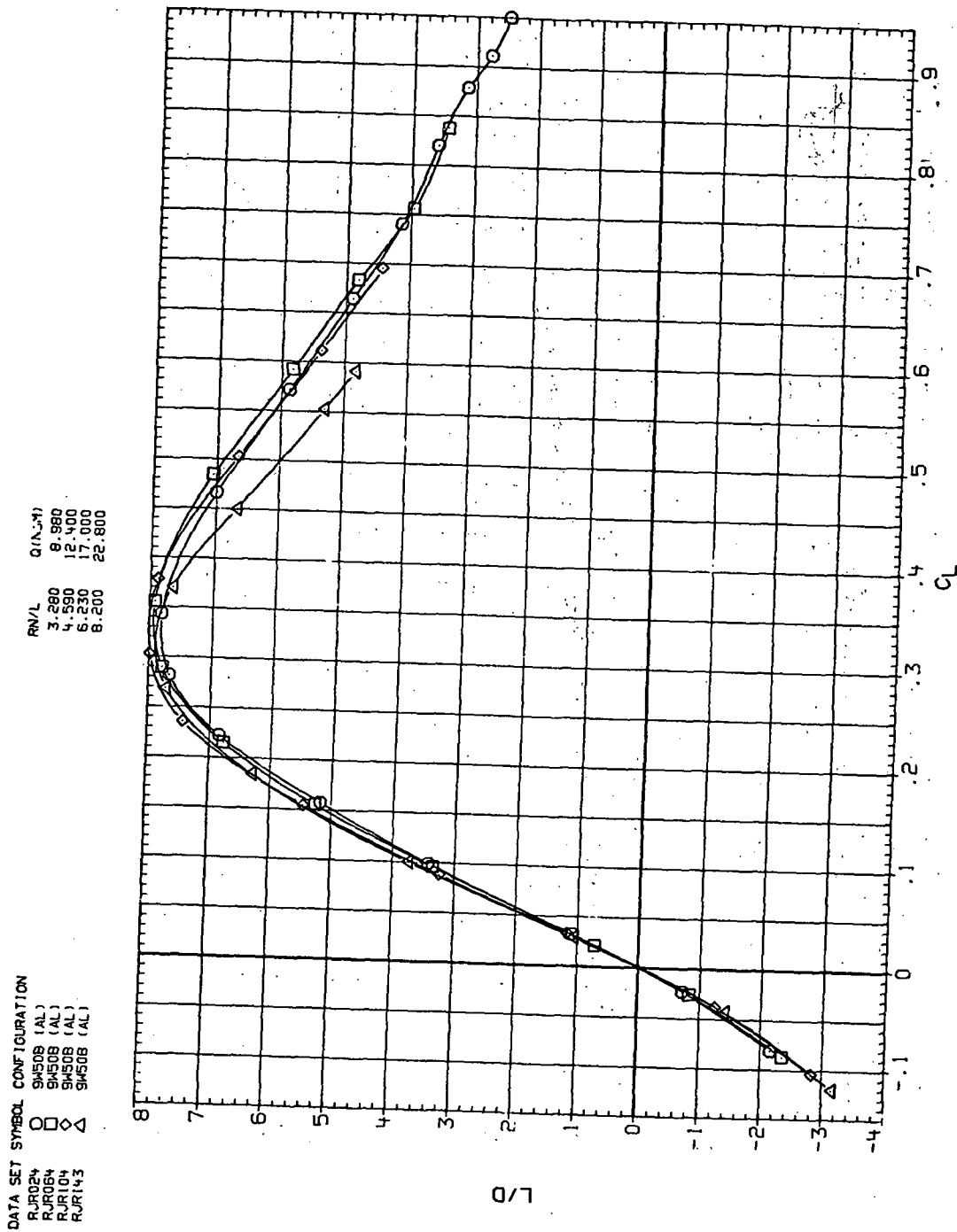
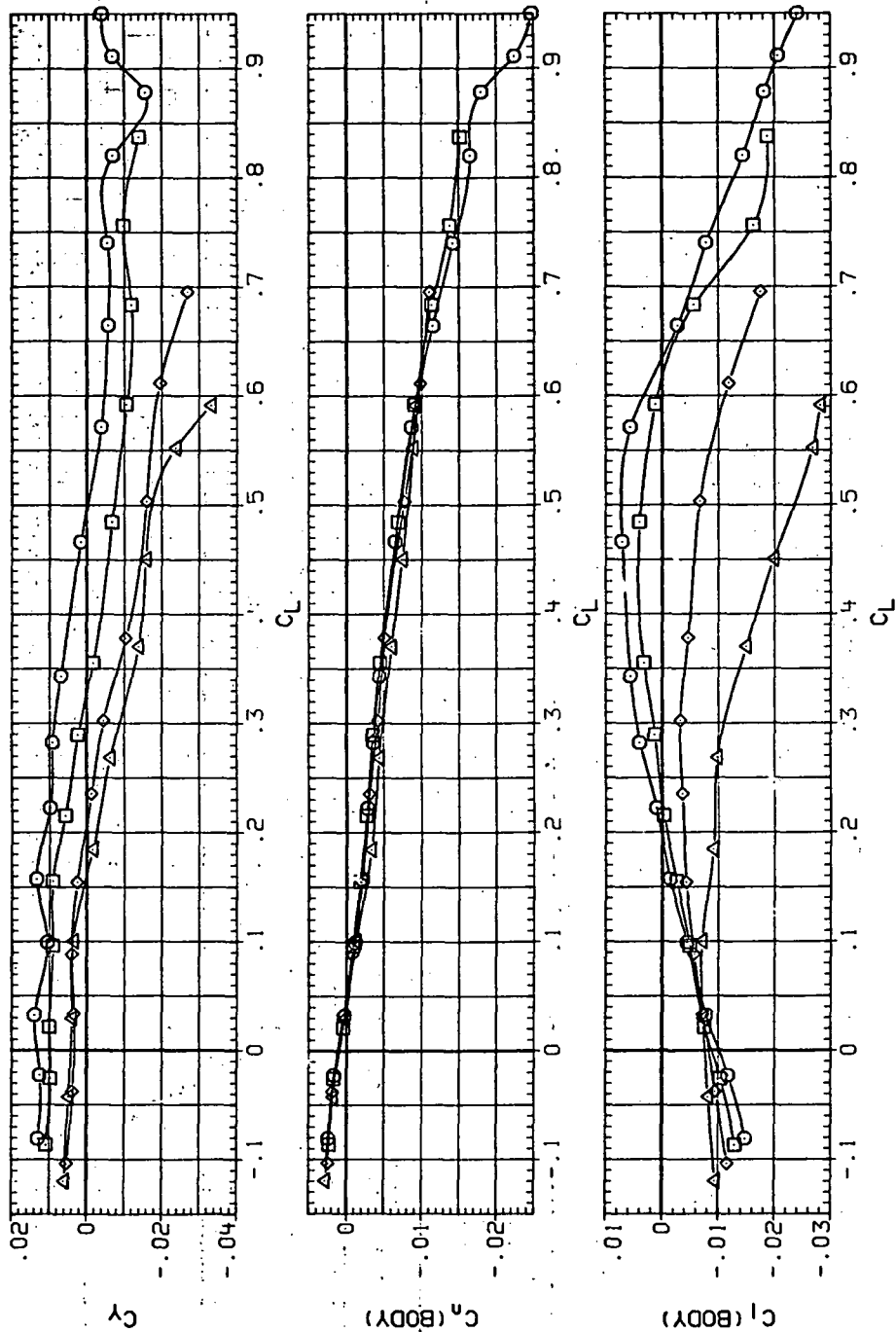
(d) L/D vs C_L .

Figure 23.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR024 SHS08 (AL)
 RJR084 SHS08 (AL)
 RJR104 SHS08 (AL)
 RJR143 SHS08 (AL)

RN/L Q (NSM)
 3.280 9.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



(e) C_Y , C_n and C_l vs C_L .

Figure 23.— Concluded.

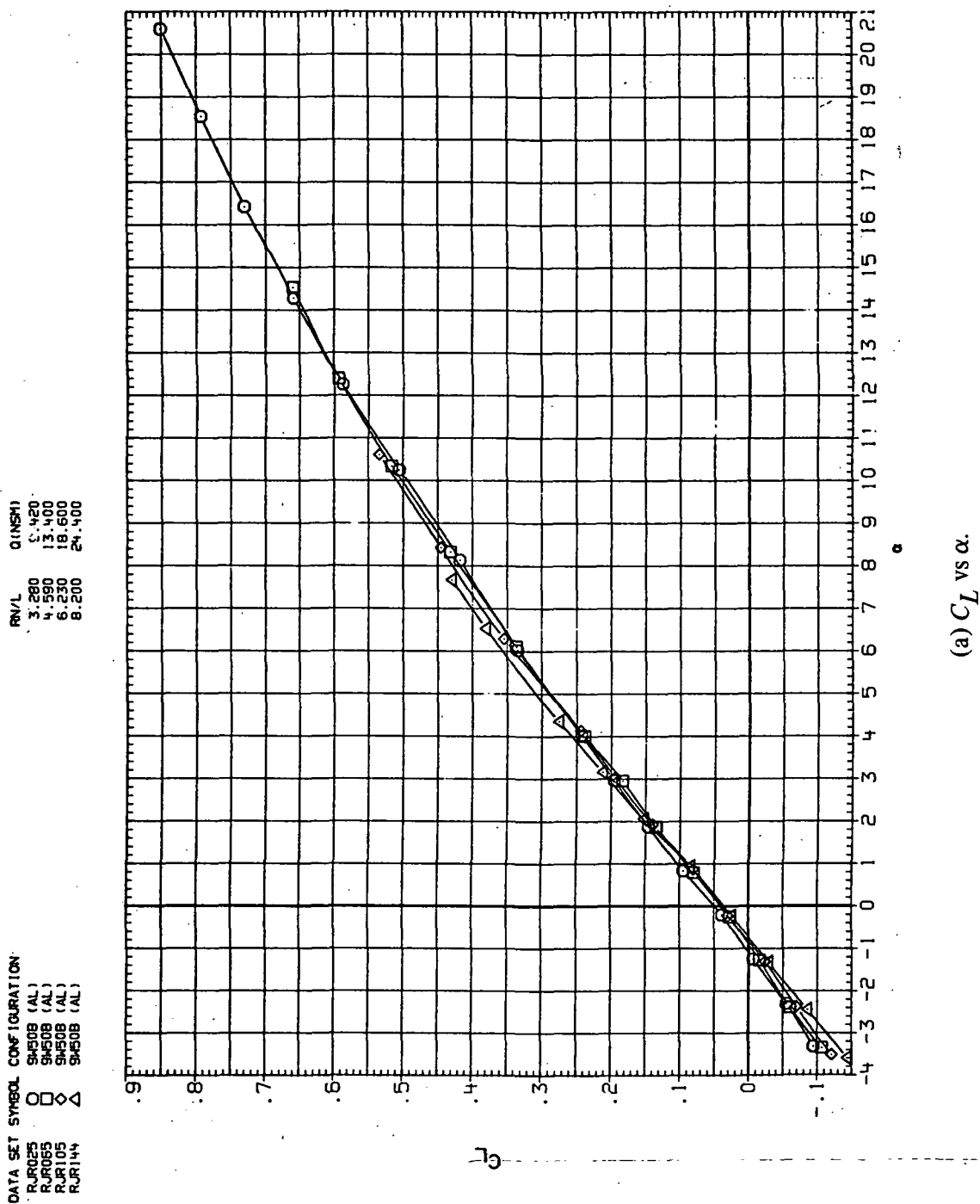
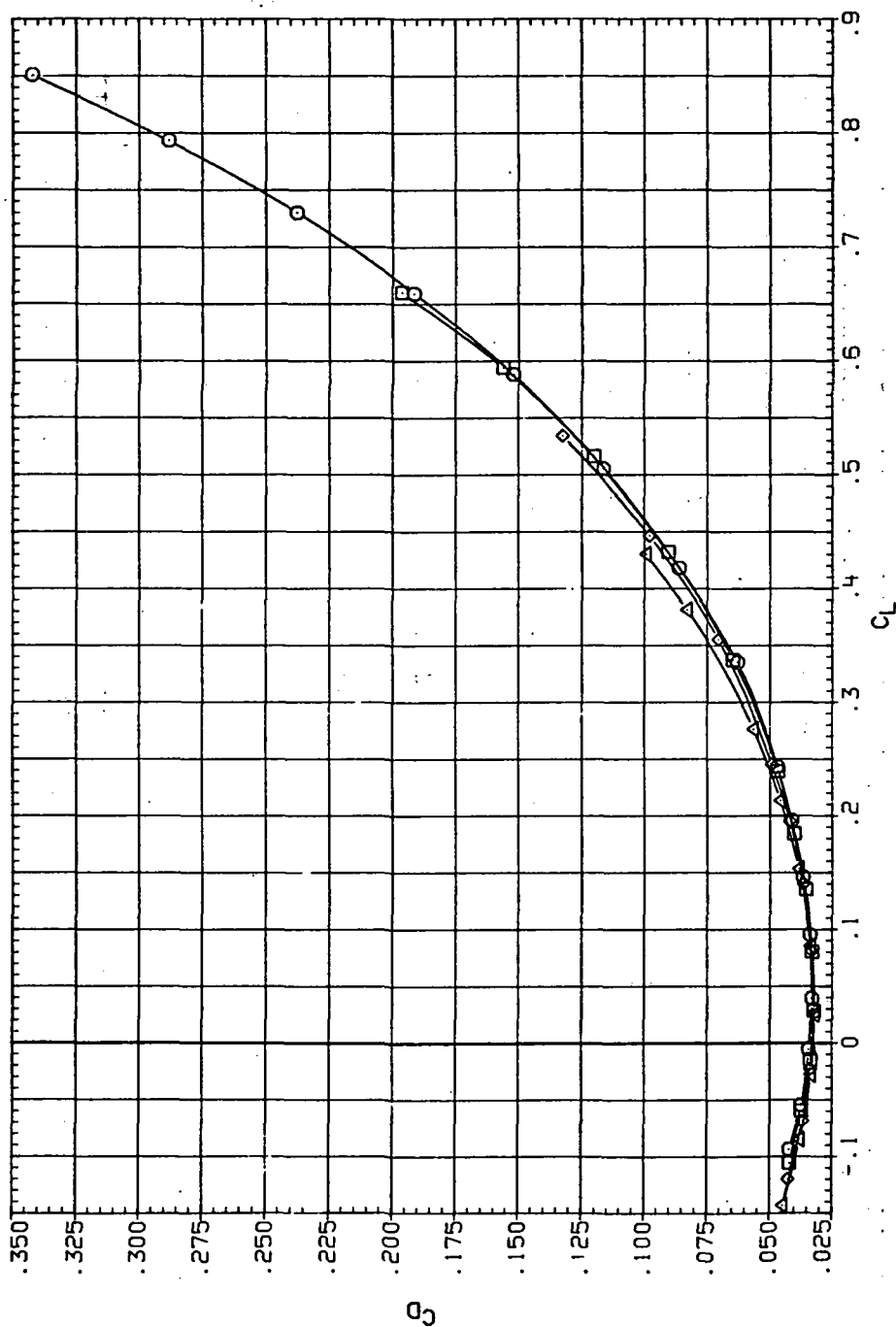


Figure 24.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR025 ○ 9H508 (AL)
 RJR065 □ 9H508 (AL)
 RJR105 ◇ 9H508 (AL)
 RJR144 △ 9H508 (AL)

RN/L Q(NSM)
 3.260 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

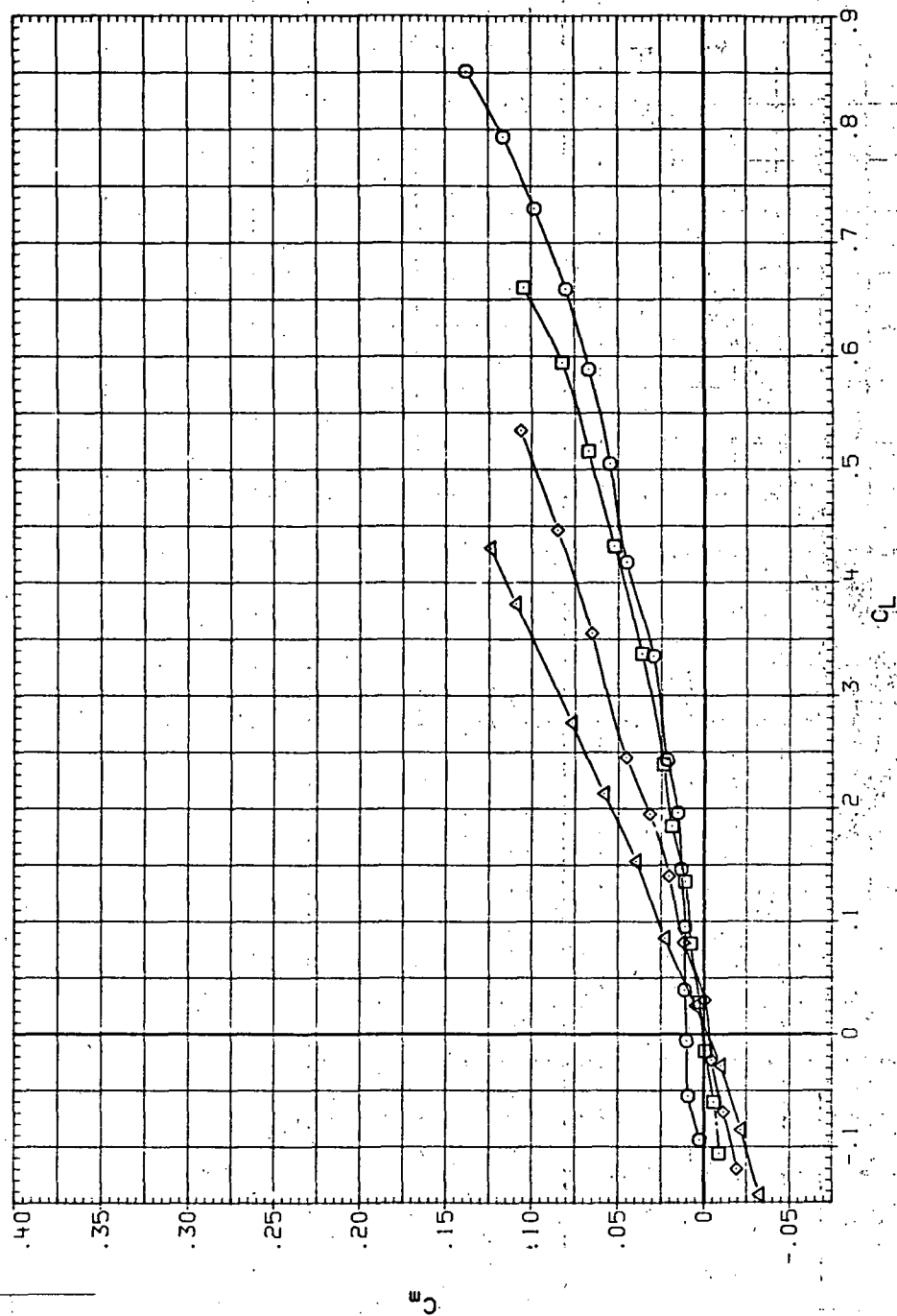


(b) C_D vs C_L .

Figure 24.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR025 $\square$ 9K5JB (AL)
 RJR065 $\square$ 9K50B (AL)
 RJR105 $\diamond$ 9K50B (AL)
 RJR144 $\triangle$ 9K50B (AL)

RN/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.500
 8.200 24.400

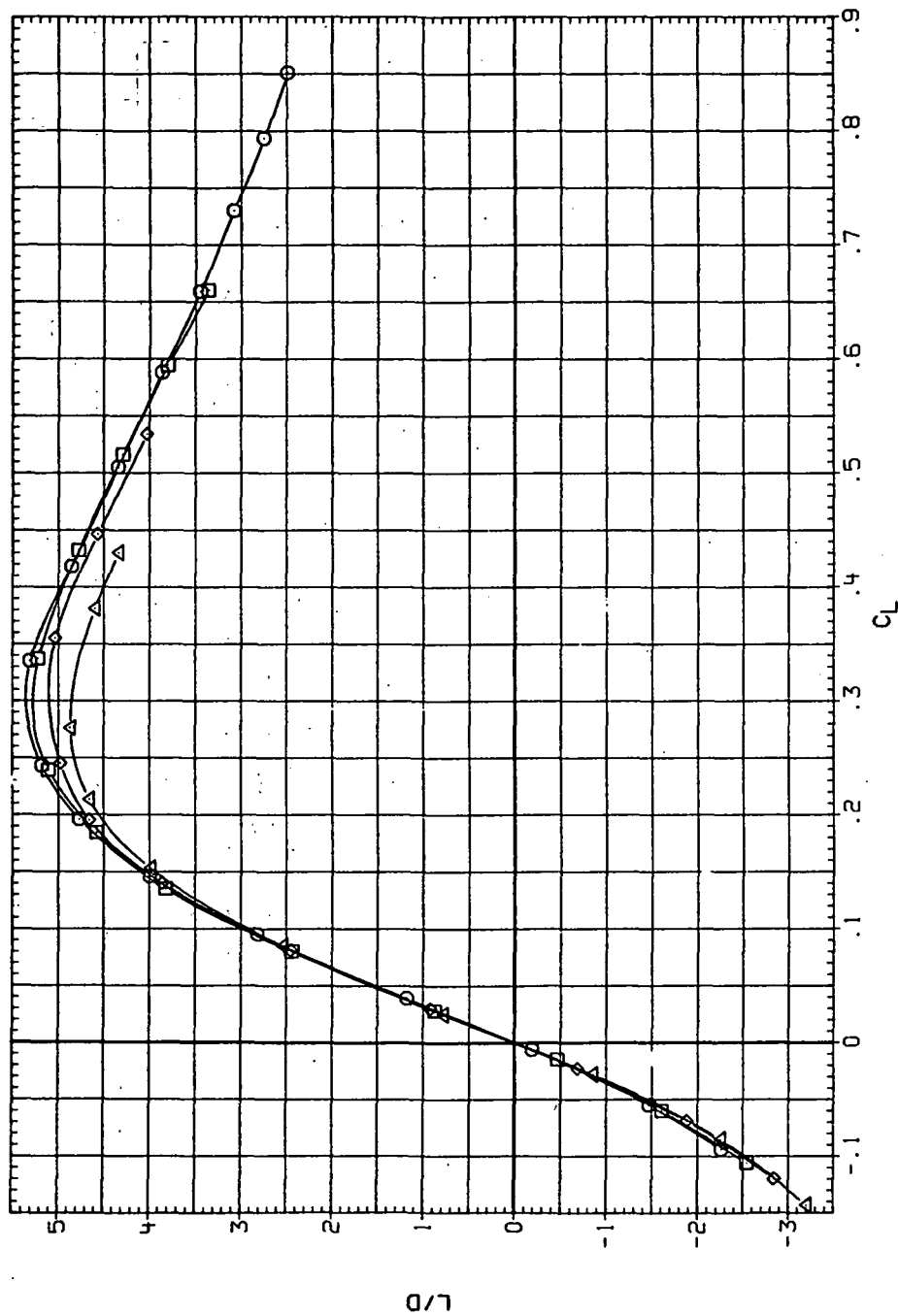


(c) C_m vs C_L

Figure 24. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR025 94508 (AL)
 RJR065 94508 (AL)
 RJR105 94508 (AL)
 RJR144 94508 (AL)

RN/L Q(NSH)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400



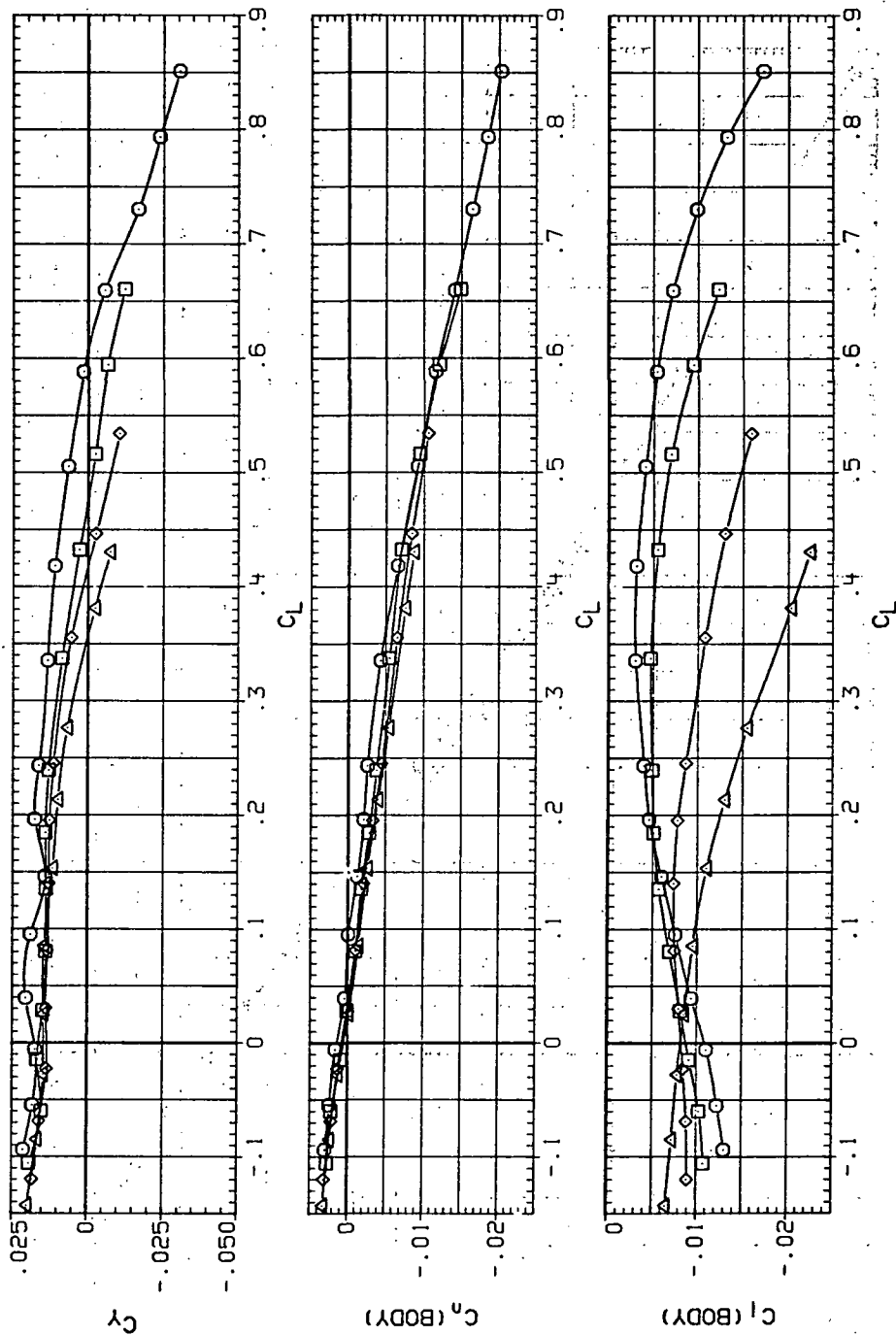
(d) L/D vs C_L .

Figure 24. — Continued.

DATA SET SYMBOL CONFIGURATION

RJR025 9H508 (AL)
 RJR065 9H508 (AL)
 RJR105 9H508 (AL)
 RJR144 9H508 (AL)

RN/L Q (NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

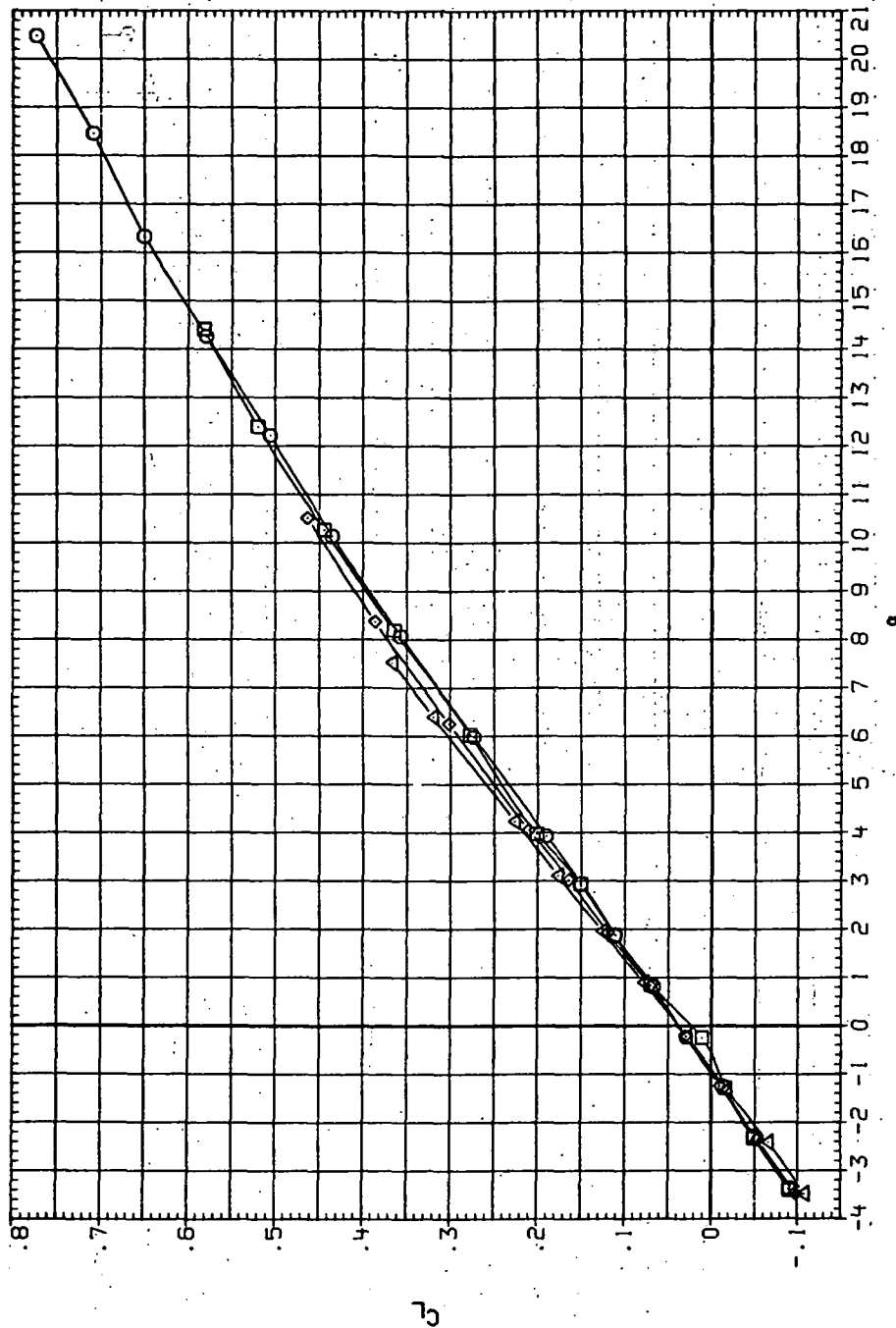


(e) C_y , C_n and C_l vs C_L

Figure 24.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR026 □ 94508 (AL)
 RJR058 □ 94508 (AL)
 RJR108 □ 94508 (AL)
 RJR149 △ 94508 (AL)

RN/L Q(NSM)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

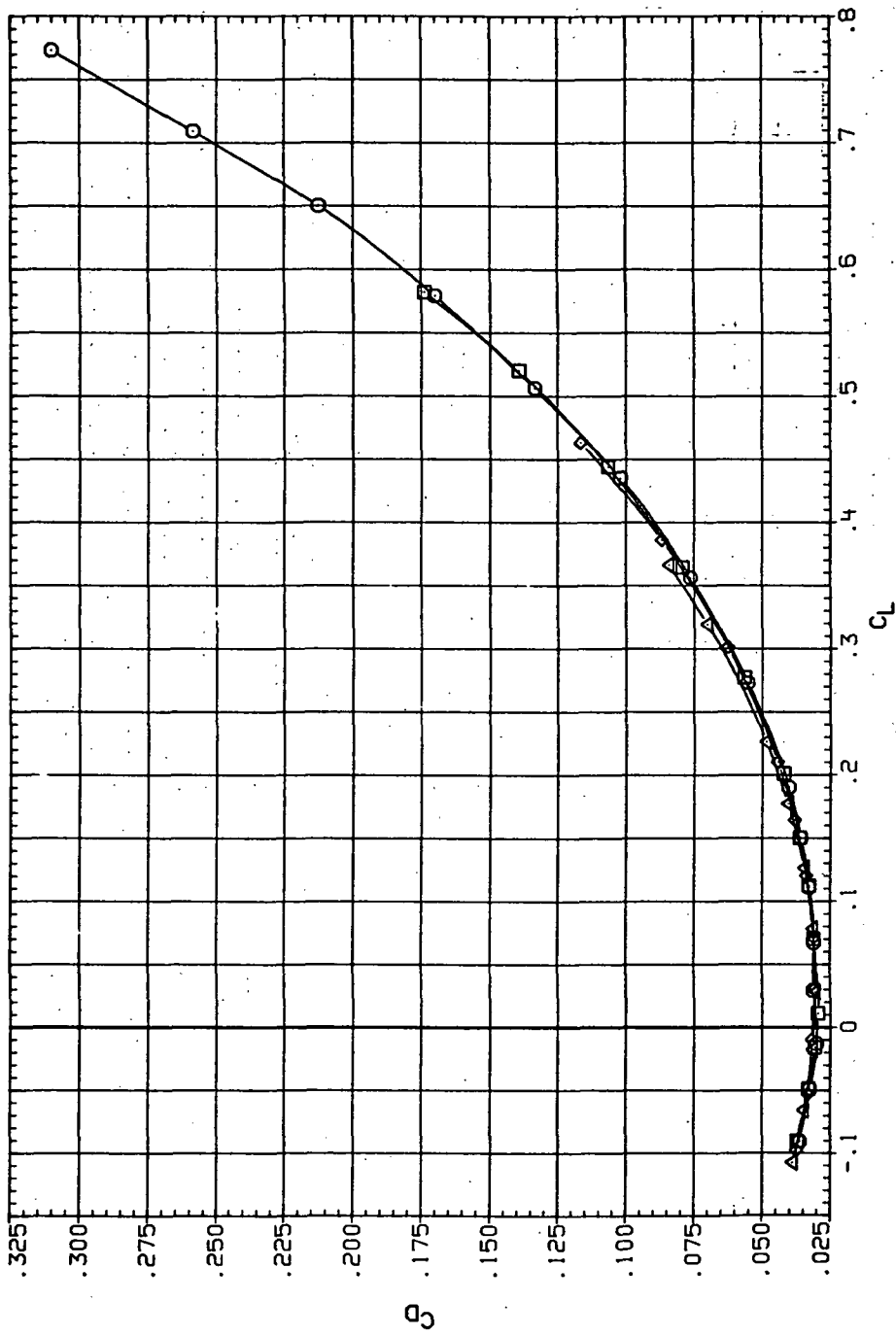


(a) C_L vs α .

Figure 25.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 2.0$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR026 ◯ 5M508 (AL)
 RJR066 ◻ 5M508 (AL)
 RJR106 ◇ 5M508 (AL)
 RJR145 △ 5M508 (AL)

RN/L Q (NEW)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

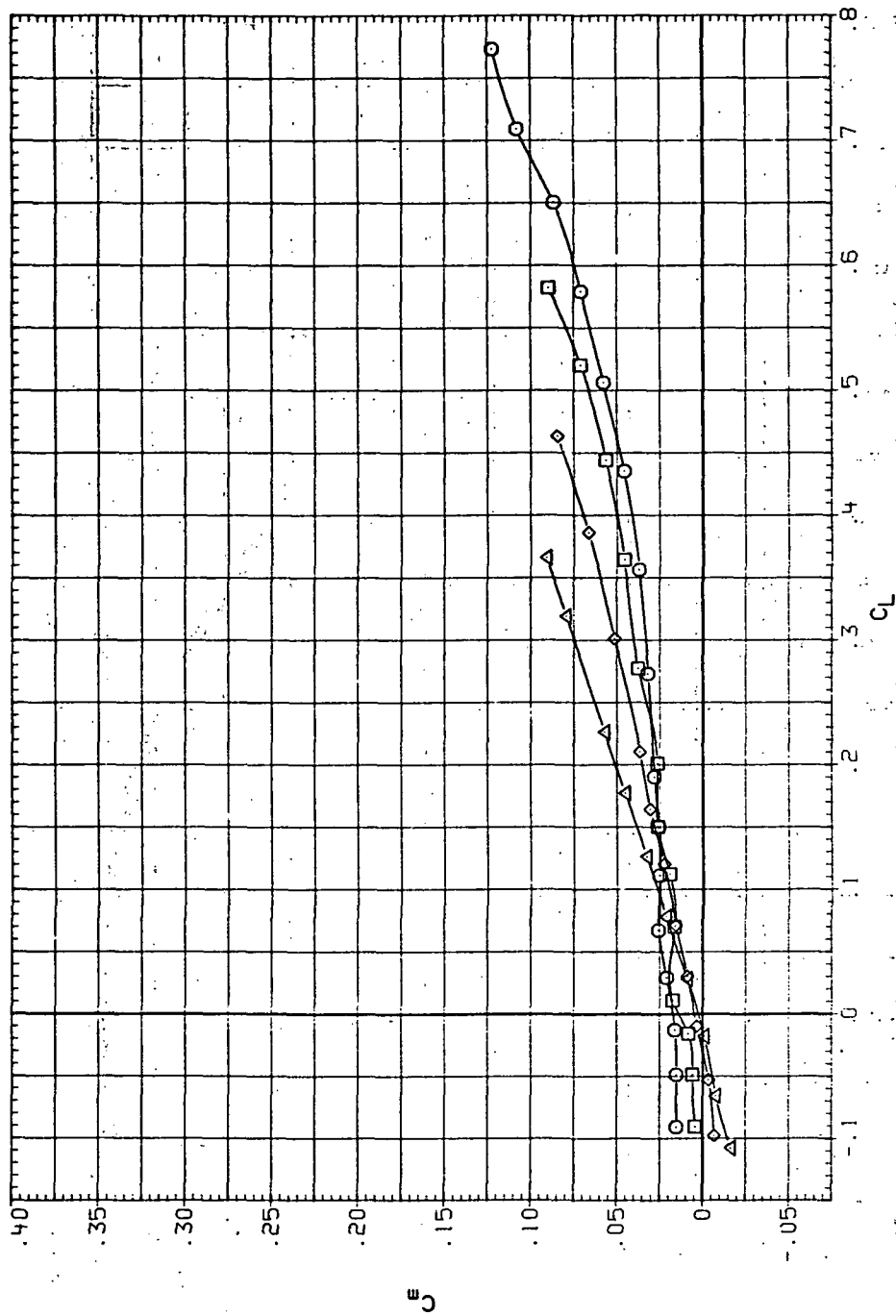


(b) C_D vs C_L .

Figure 25.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR026 ○ 94508 (AL)
 RJR066 □ 94508 (AL)
 RJR106 ◇ 94508 (AL)
 RJR145 △ 94508 (AL)

RV/L Q (NSM)
 3.280 9.450
 4.592 13.500
 6.230 18.500
 8.200 24.700

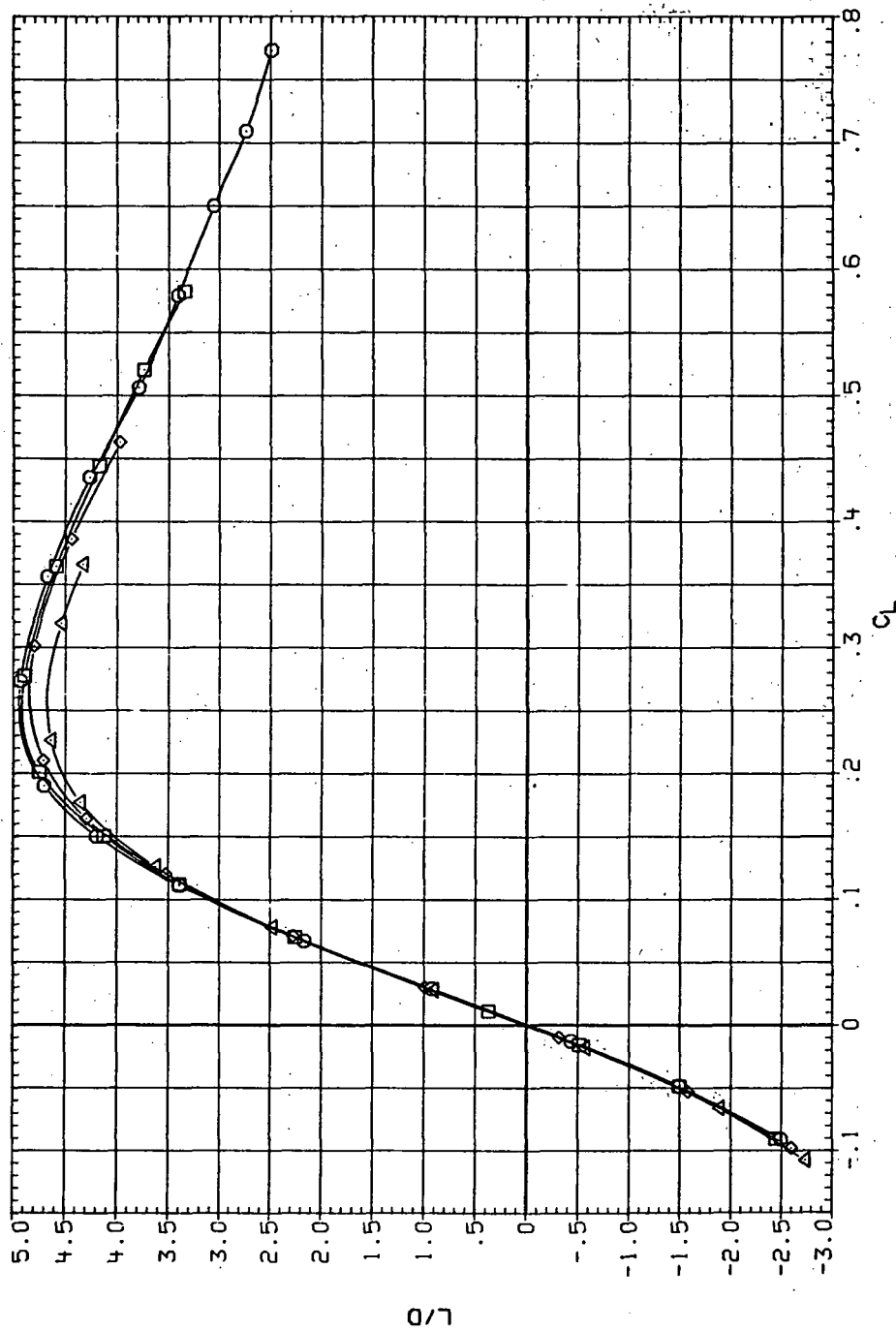


(c) C_m vs C_L

Figure 25.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR026 $\square$ 9W50B (AL)
 RJR066 $\diamond$ 9W50B (AL)
 RJR106 $\triangle$ 9W50B (AL)
 RJR145 $\triangle$ 9W50B (AL)

RN/L Q INSH1
 3.280 9.450
 4.590 13.500
 6.230 19.500
 8.200 24.700

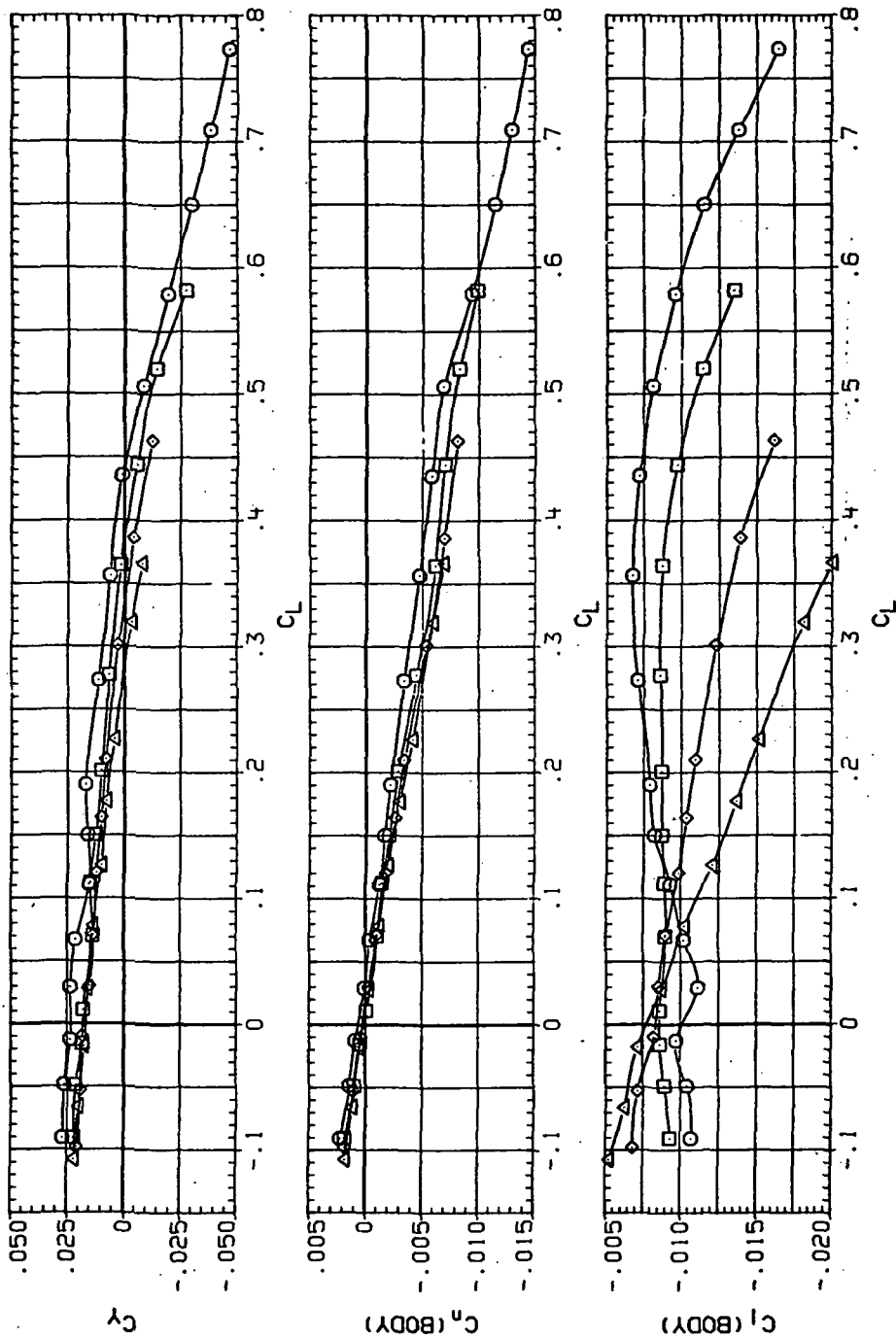


(d) L/D vs C_L .

Figure 25.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR026 ○ 9450B (AL)
 RJR066 □ 9450B (AL)
 RJR105 △ 9450B (AL)
 RJR145 ◇ 9450B (AL)

RN/L Q(NSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

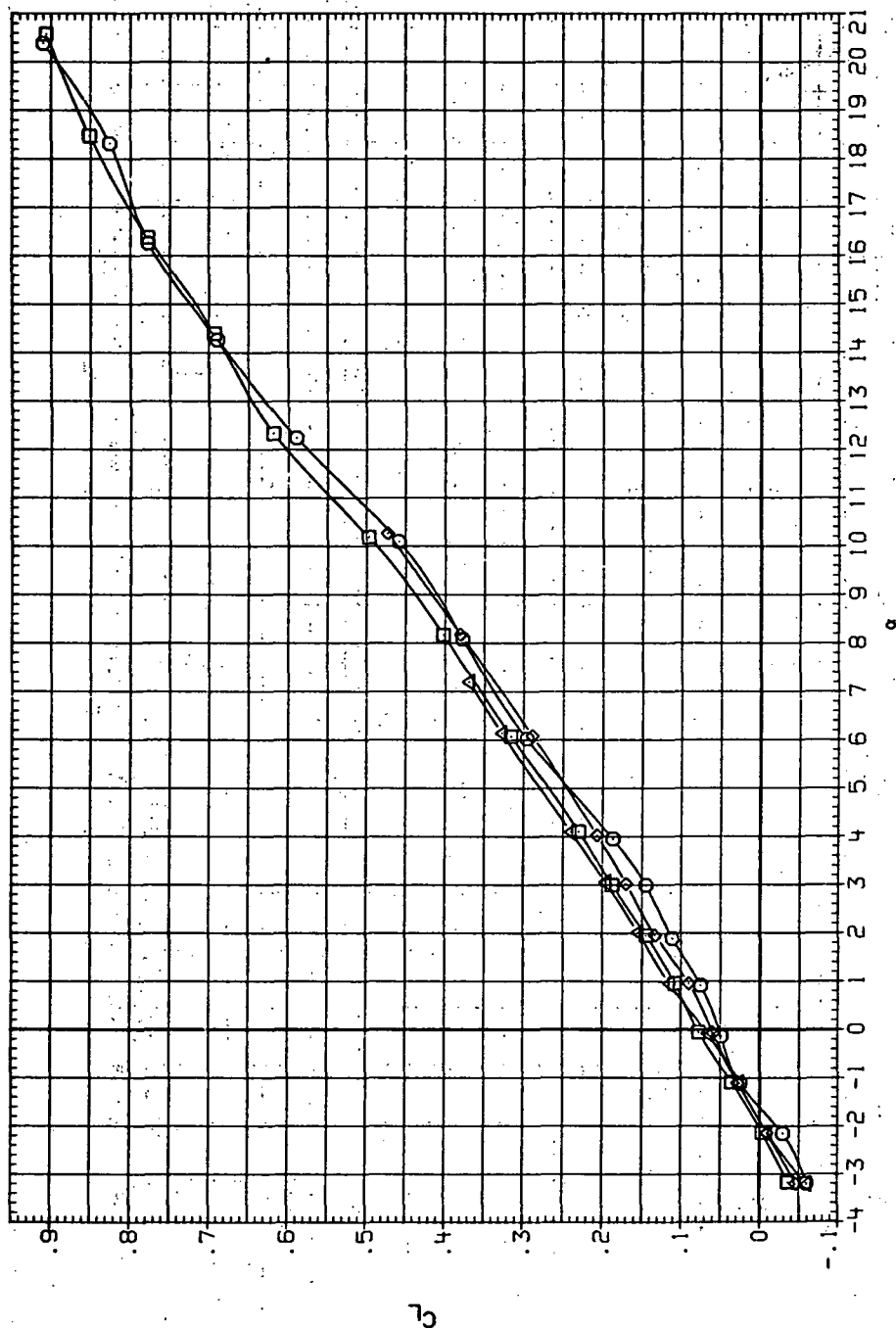


(e) C_Y , C_n and C_l vs C_L .

Figure 25.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR028 □ □ □
 RJR068 □ □ □
 RJR108 □ □ □
 RJR147 □ □ □

RV/L Q(NSM)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

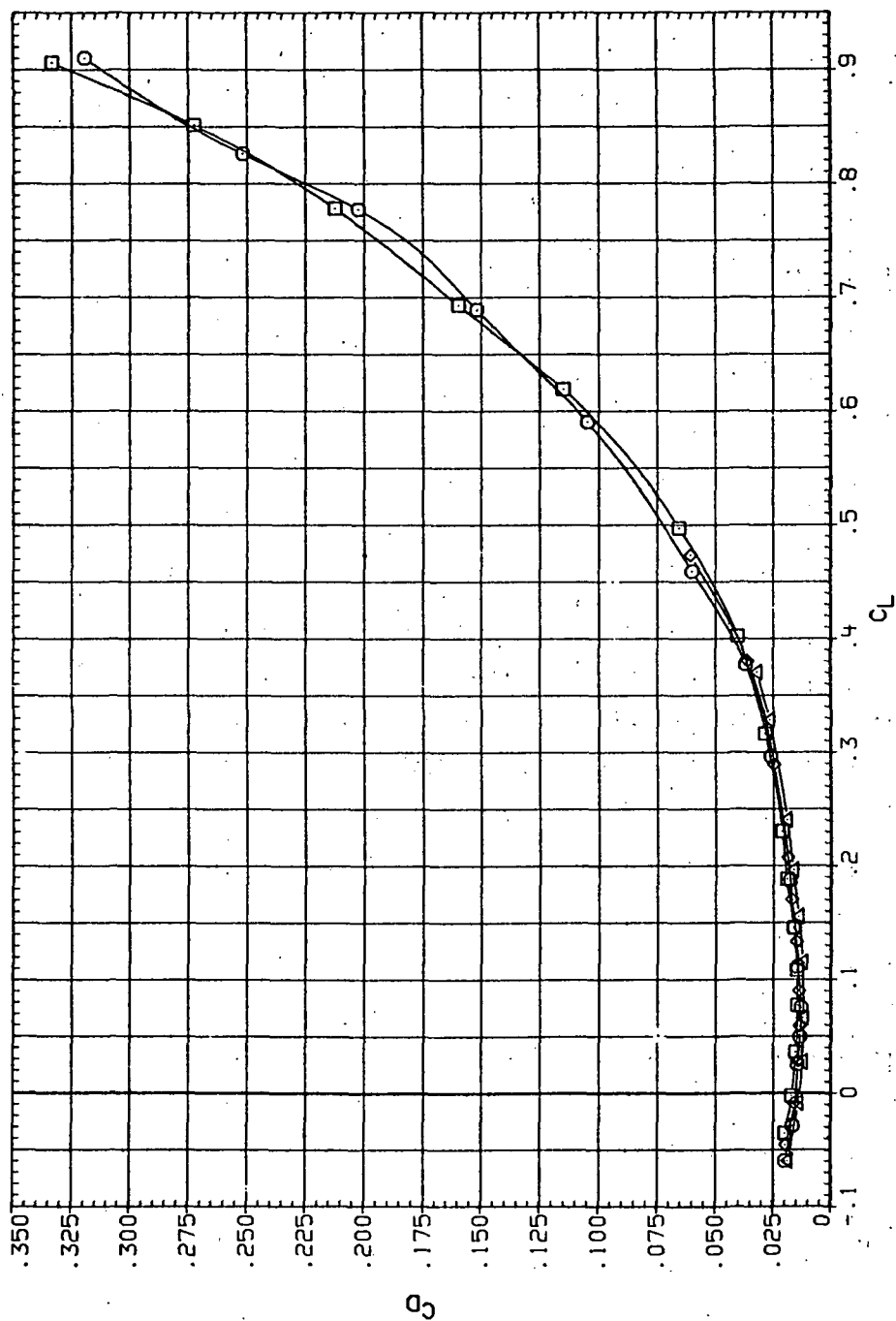


(a) C_L vs α .

Figure 26.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.4$ and the modified NACA 65A204 airfoil).

DATA SET SYMCL CONFIGURATION
 RUP028 ○ SH55B (AL)
 RUP068 □ SH55B (AL)
 RUP108 ◇ SH55B (AL)
 RUP147 △ SH55B (AL)

RN/L Q(NSH)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

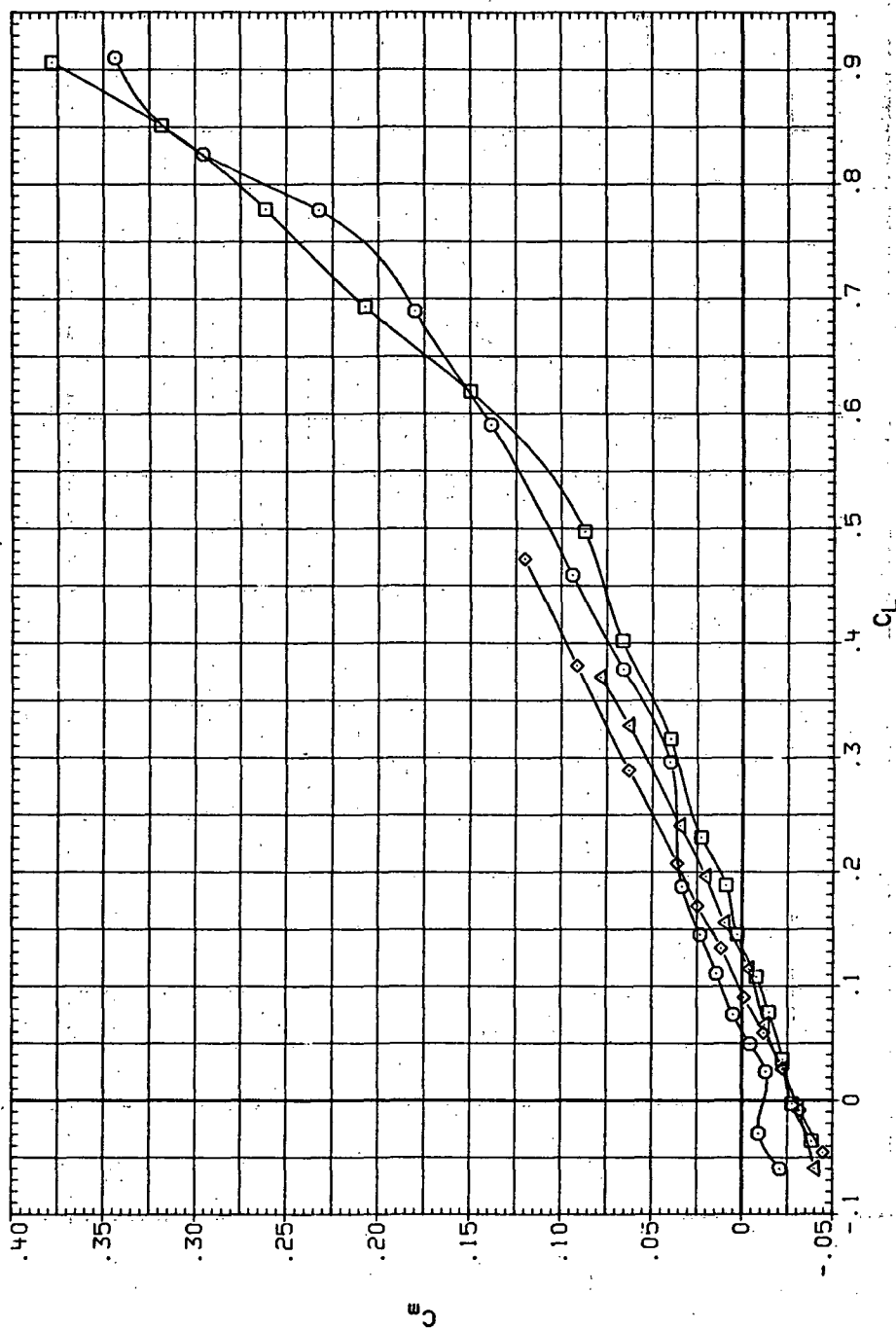


(b) C_D vs C_L

Figure 26.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR028 ○ 9M55B (AL)
 RJR058 □ 9M55B (AL)
 RJR108 ◇ 9M55B (AL)
 RJR147 △ 9M55B (AL)

RN/L Q(NSH)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

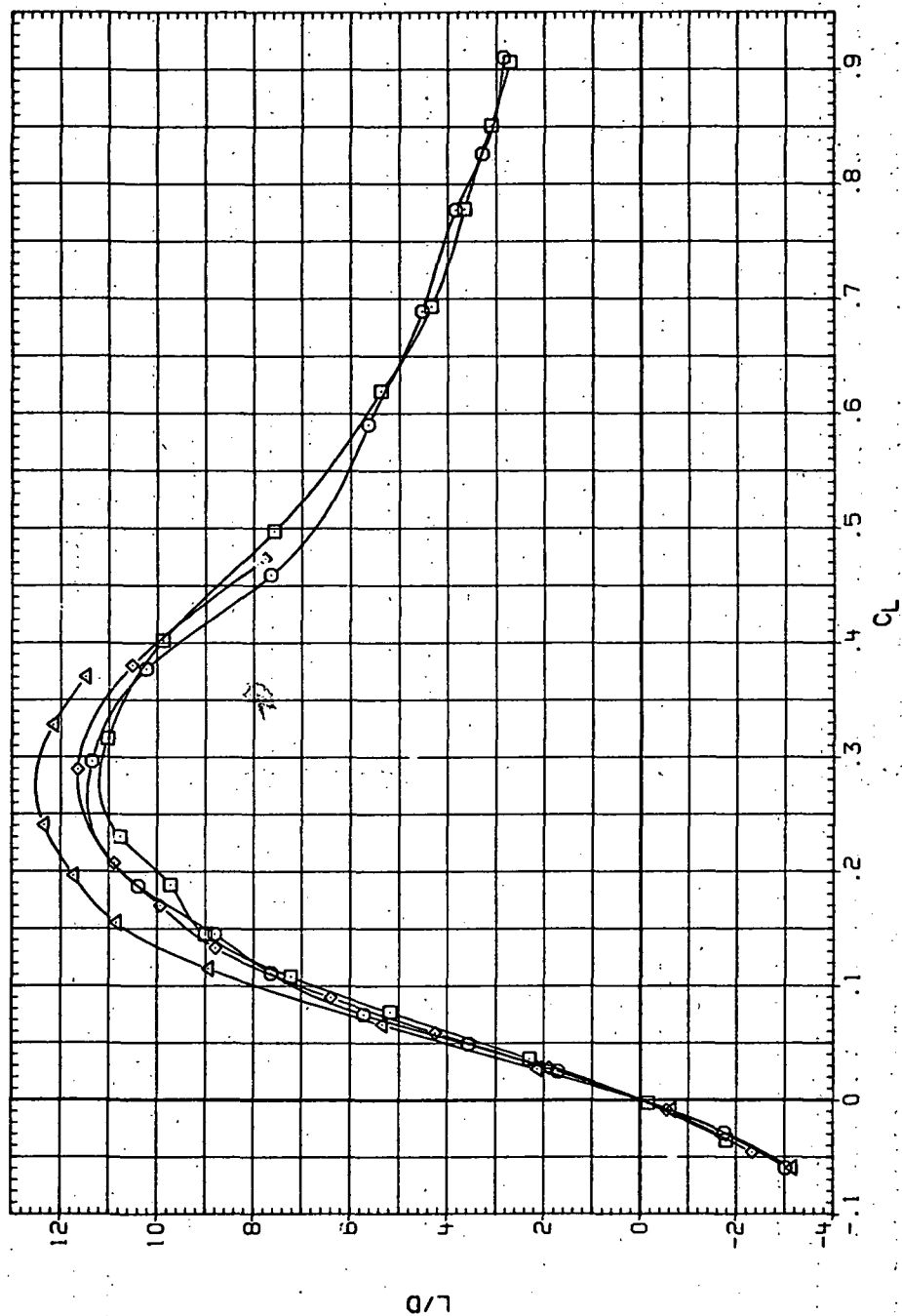


(c) C_m vs C_L .

Figure 26.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR028 ◻ 54558 (AL)
 RJR068 ◻ 54558 (AL)
 RJR108 ◻ 54558 (AL)
 RJR147 ◻ 54558 (AL)

RM/L Q (NSM)
 3.280 3.870
 4.590 5.400
 6.230 7.480
 8.200 9.900

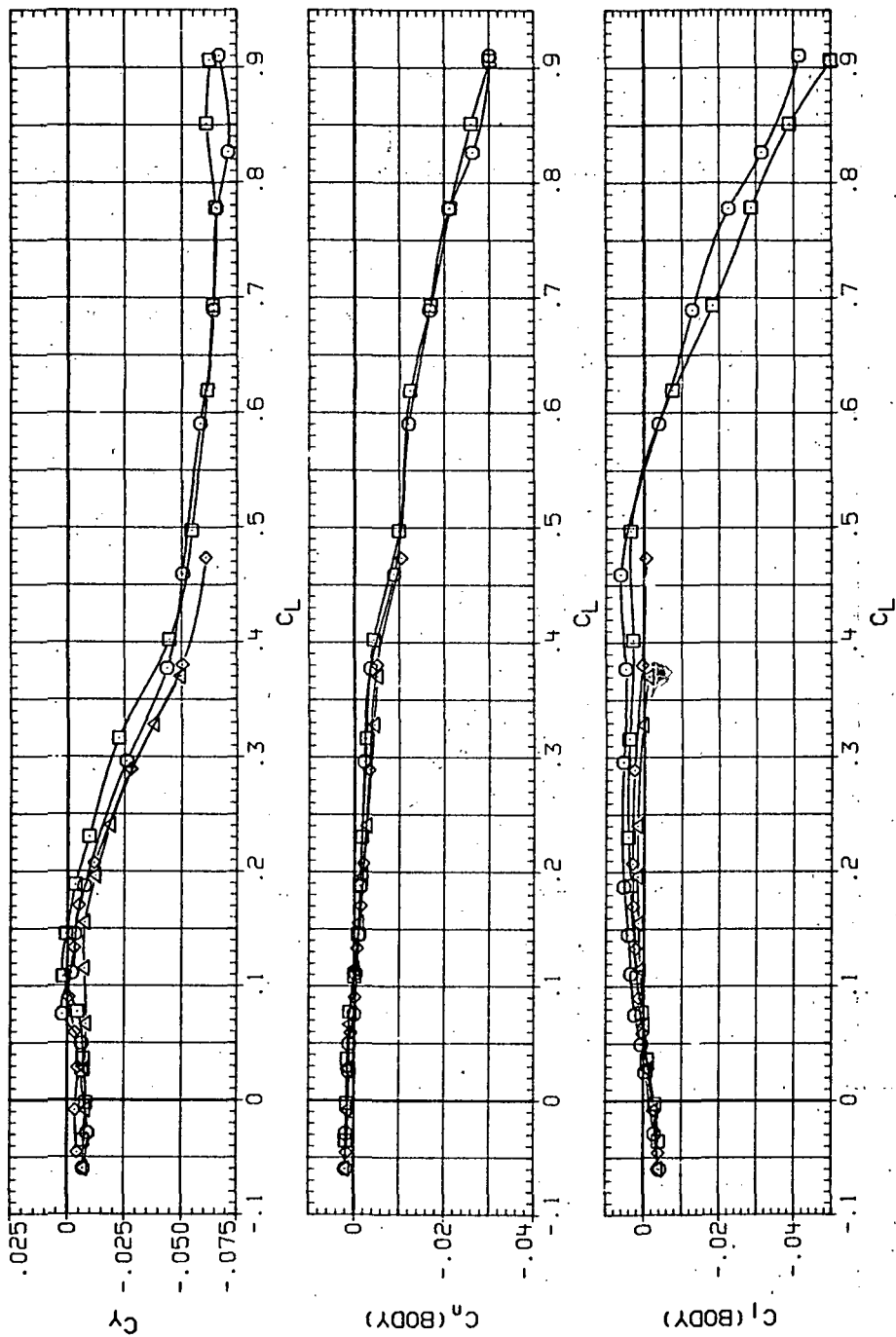


(d) L/D vs C_L .

Figure 26.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR026 $\square$ 5M55B (AL)
 RJR068 $\square$ 5M55B (AL)
 RJR108 $\square$ 5M55B (AL)
 RJR147 $\square$ 5M55B (AL)

RN/L Q(NSH)
 3.280 3.87C
 4.590 5.400
 6.230 7.480
 8.200 9.900

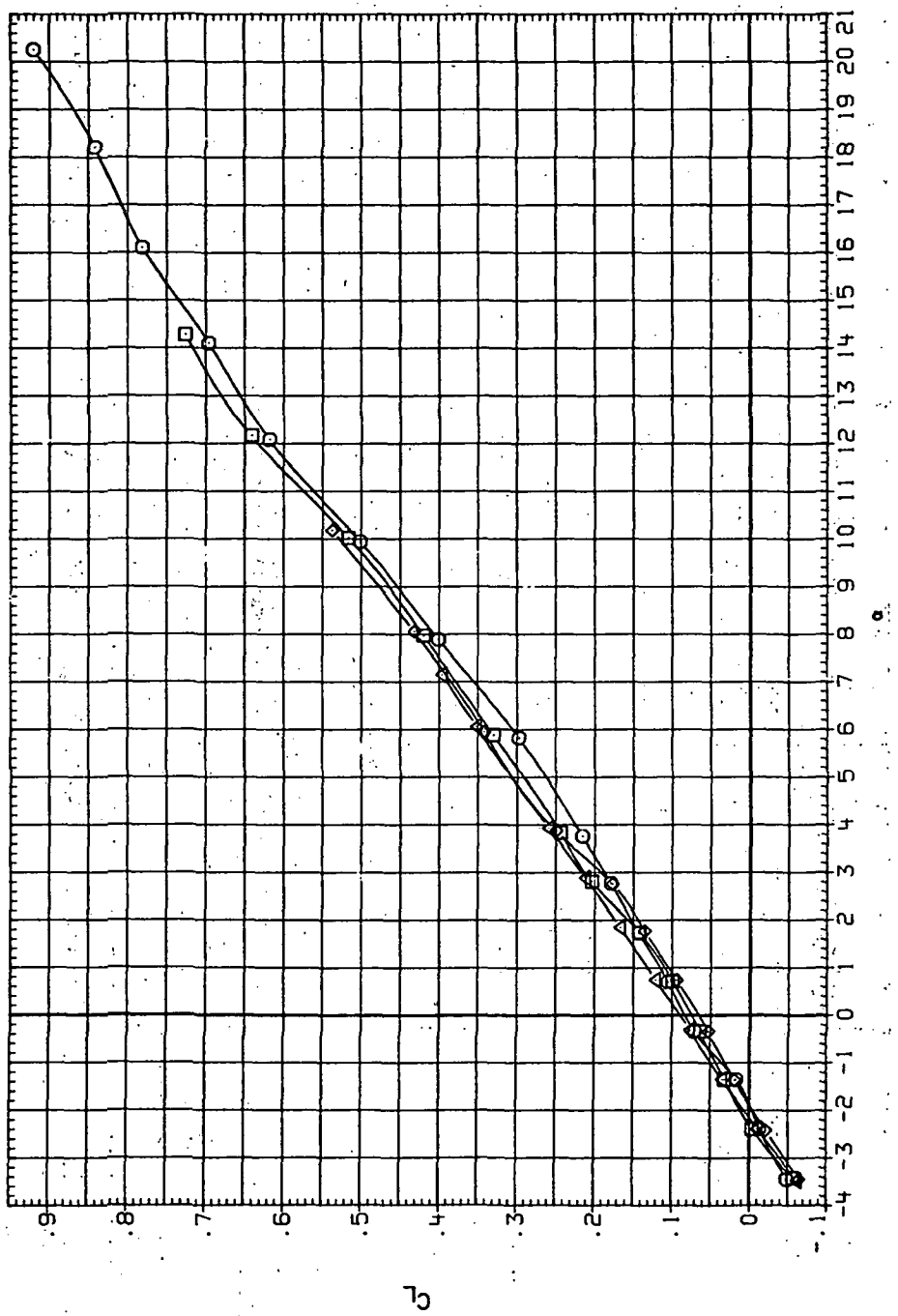


(e) C_Y , C_n and C_l vs C_L .

Figure 26. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR029 $\square$ SH55B (AL)
 RJR059 $\square$ SH55B (AL)
 RJR109 $\square$ SH55B (AL)
 RJR149 $\square$ SH55B (AL)

RN/L Q (NSM)
 3.280 5.610
 4.590 7.710
 6.250 10.600
 8.200 14.100

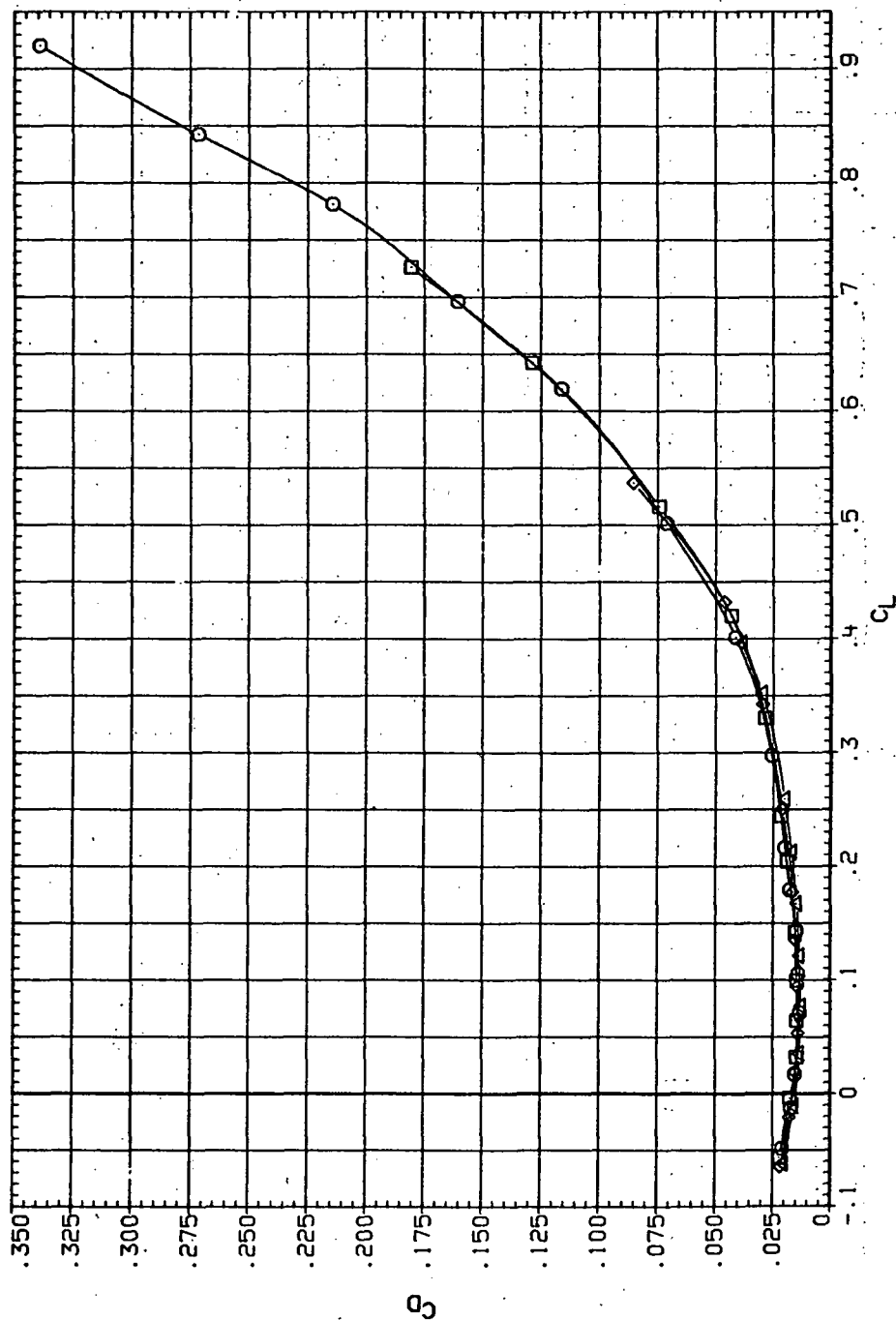


(a) C_L vs α .

Figure 27.- Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUP029 ○ 9455B (AL)
 RUP069 □ 9455B (AL)
 RUP109 ◇ 9455B (AL)
 RUP148 △ 9455B (AL)

RN/L Q(NSH)
 3.260 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

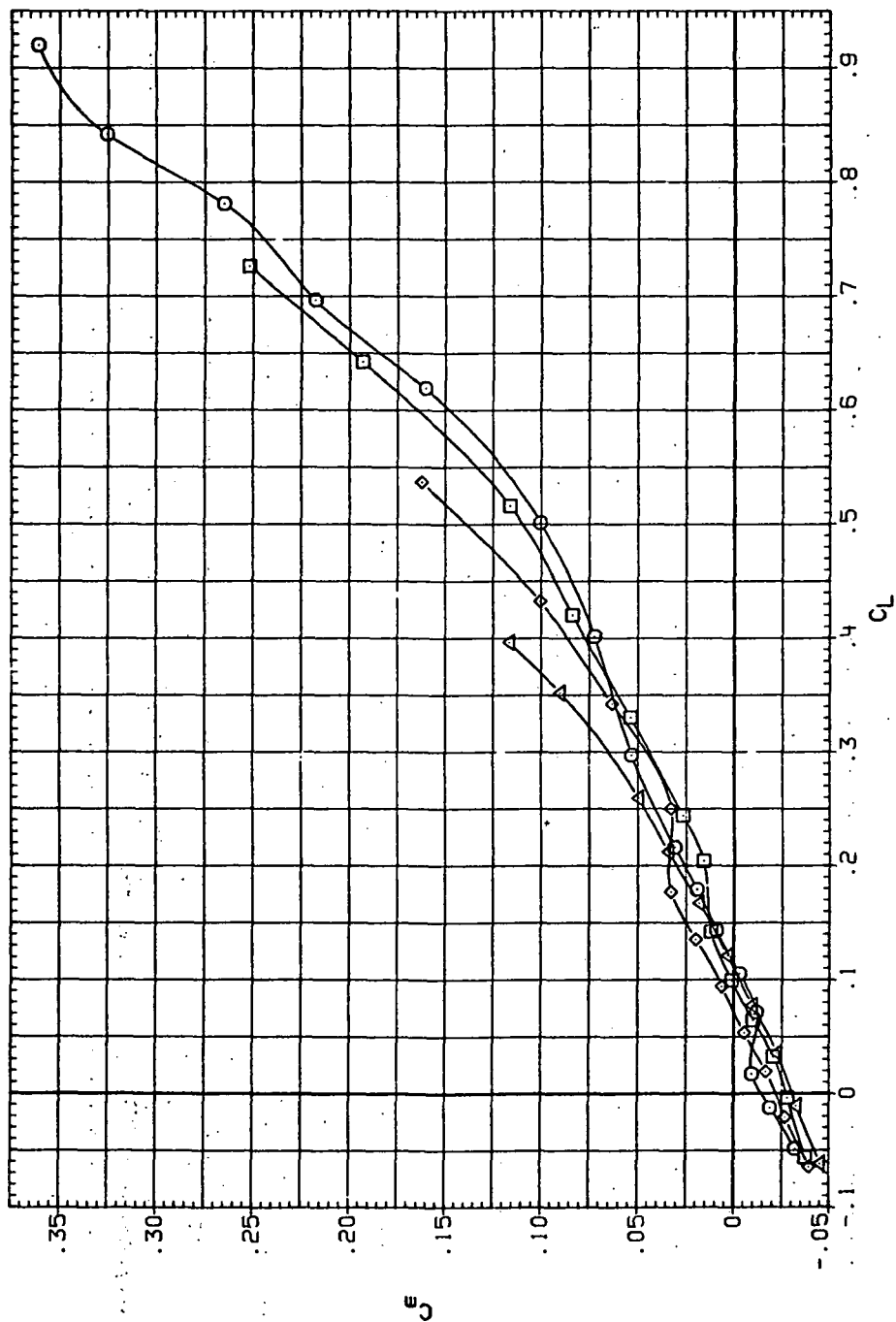


(b) C_D vs C_L

Figure 27.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR029 9455B (AL)
 RJR069 9455B (AL)
 RJR109 9455B (AL)
 RJR148 9455B (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

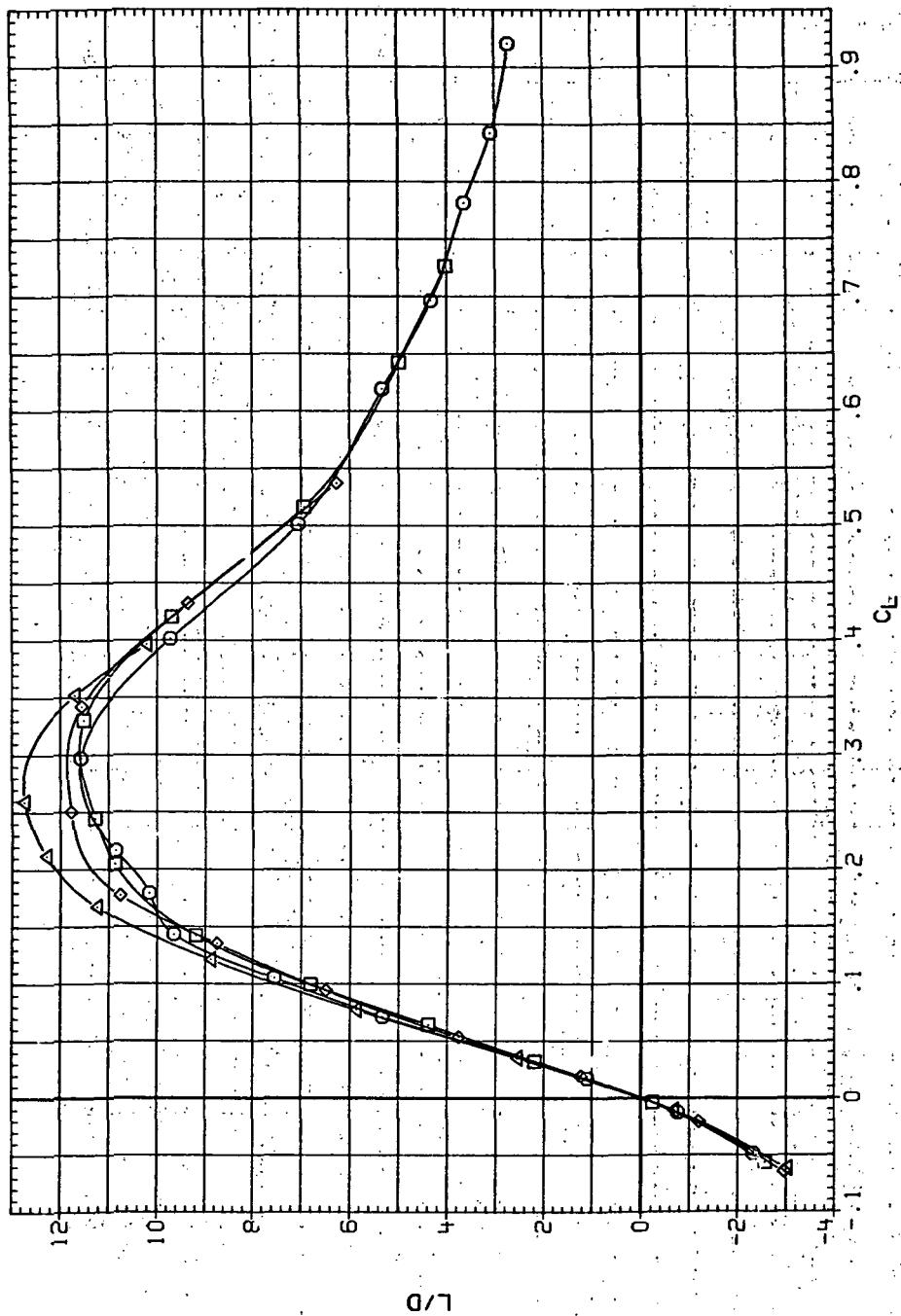


(c) C_m vs C_L .

Figure 27.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR029 9455B (AL)
 RJR069 9455B (AL)
 RJR109 9455B (AL)
 RJR148 9455B (AL)

RN/L Q(NSK)
 3.260 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

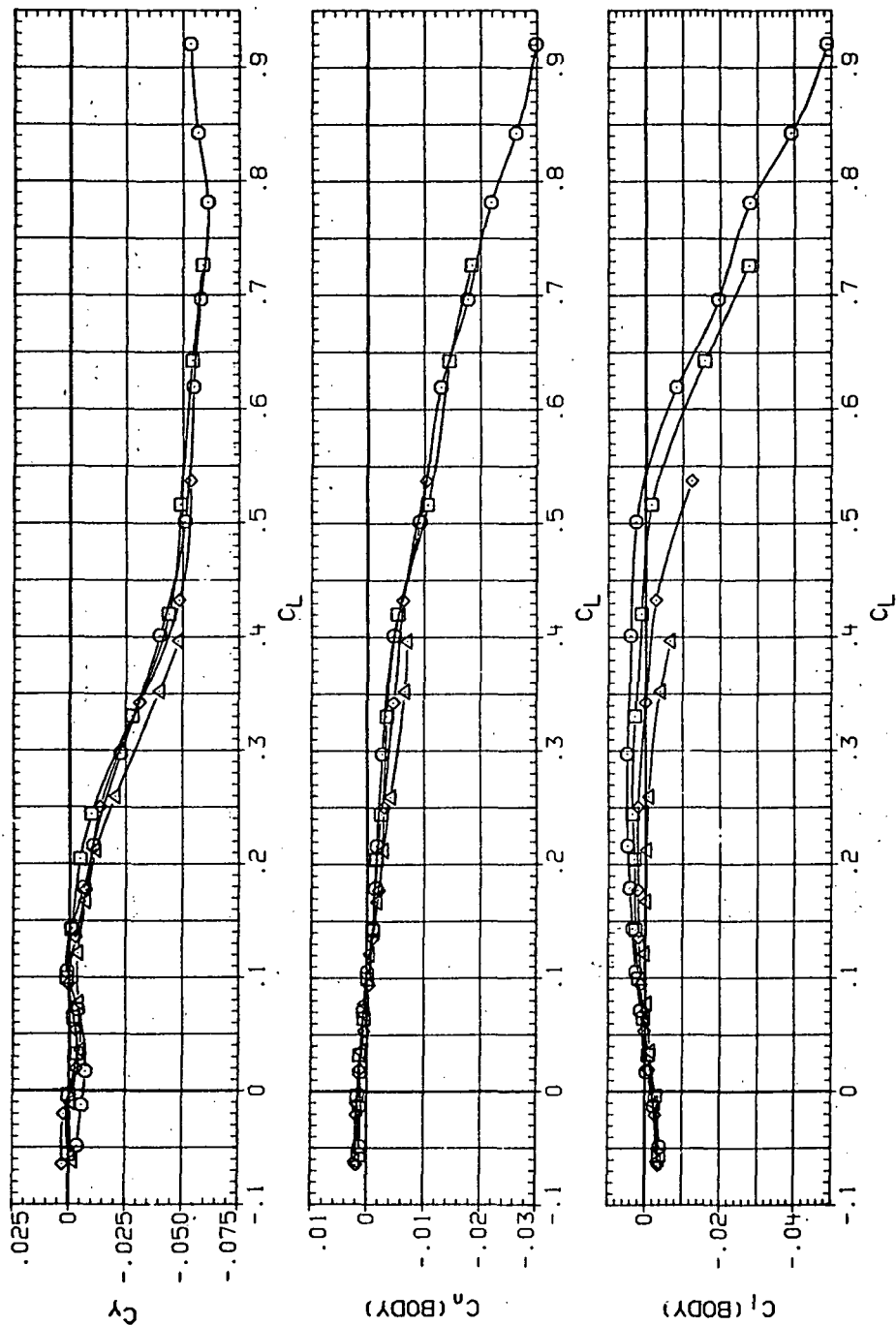


(d) L/D vs C_L

Figure 27.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR029 94558 (AL)
 RJR089 94558 (AL)
 RJR109 94558 (AL)
 RJR148 94558 (AL)

RN/L Q(NSM)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

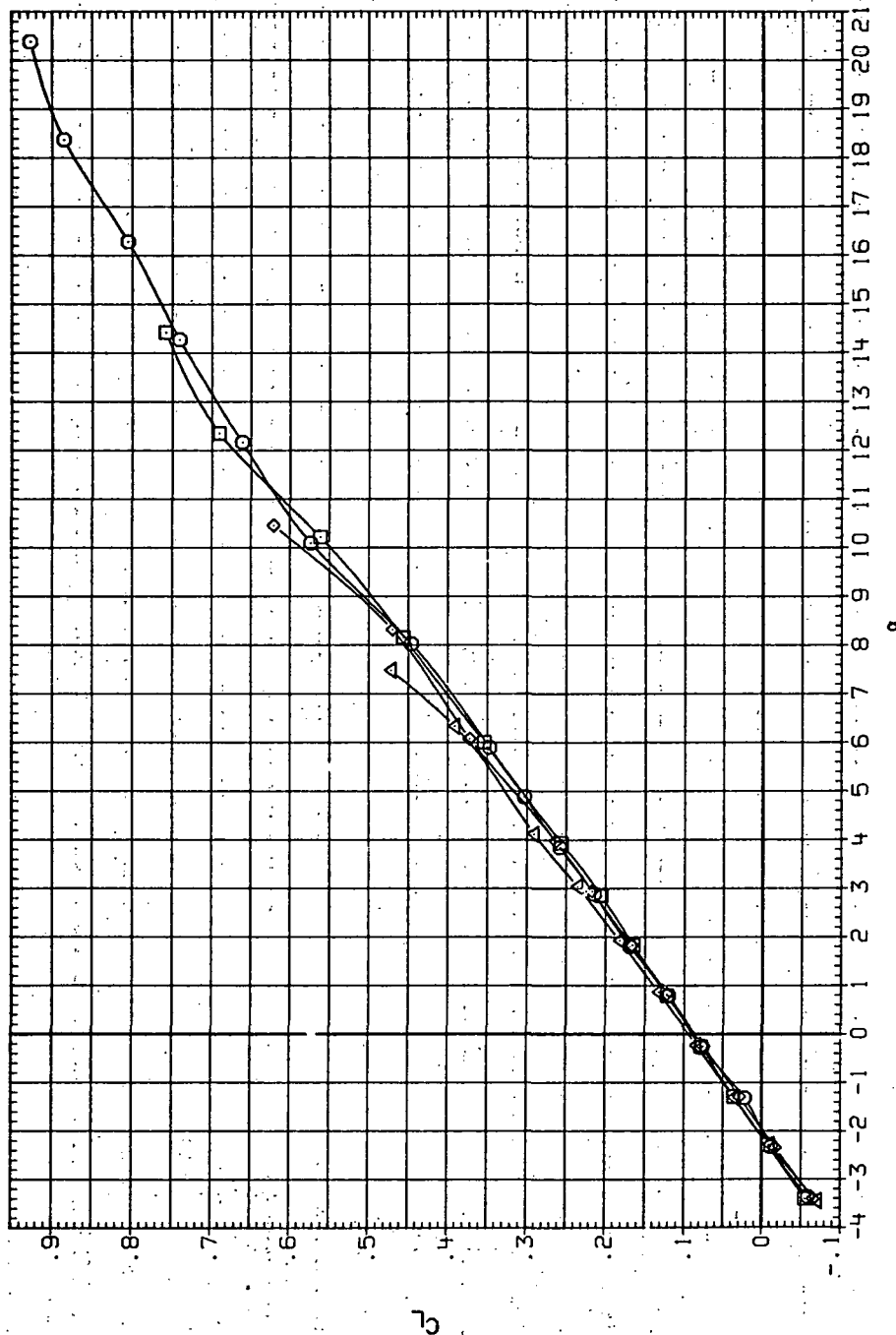


(e) C_γ , C_n and C_l vs C_L .

Figure 27.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RUR030 ○ 5455B (AL)
 RUR070 □ 5455B (AL)
 RUR110 ◇ 5455B (AL)
 RUR149 △ 5455B (AL)

RN/L Q(NSH)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800



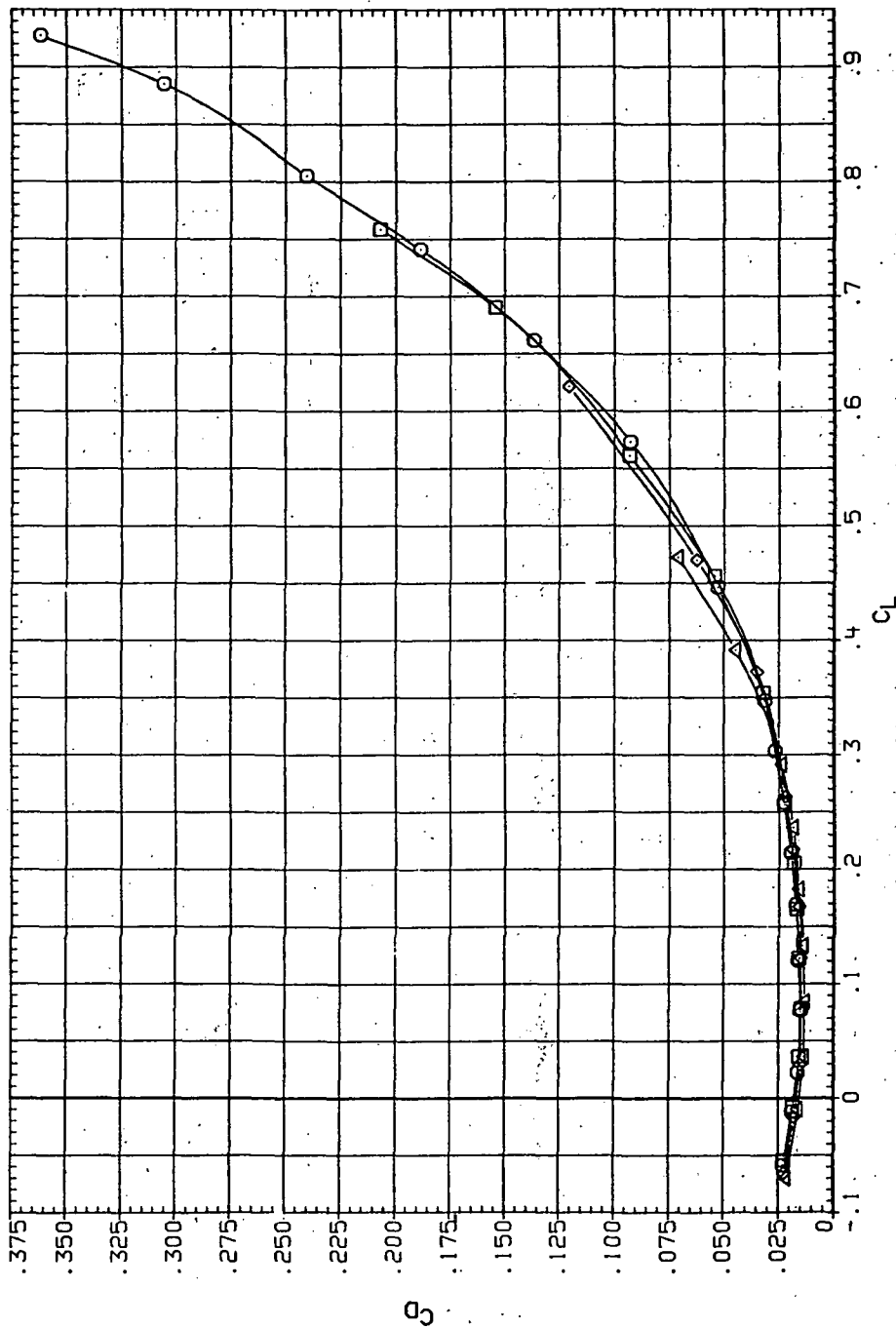
(a) C_L vs α .

Figure 28.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.8$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION

RJR030 9M55B (AL)
 RJR070 9M55B (AL)
 RJR110 9M55B (AL)
 RJR149 9M55B (AL)

RN/L Q(NSM)
 3.280 7.06
 4.590 9.720
 6.230 13.400
 8.200 17.800

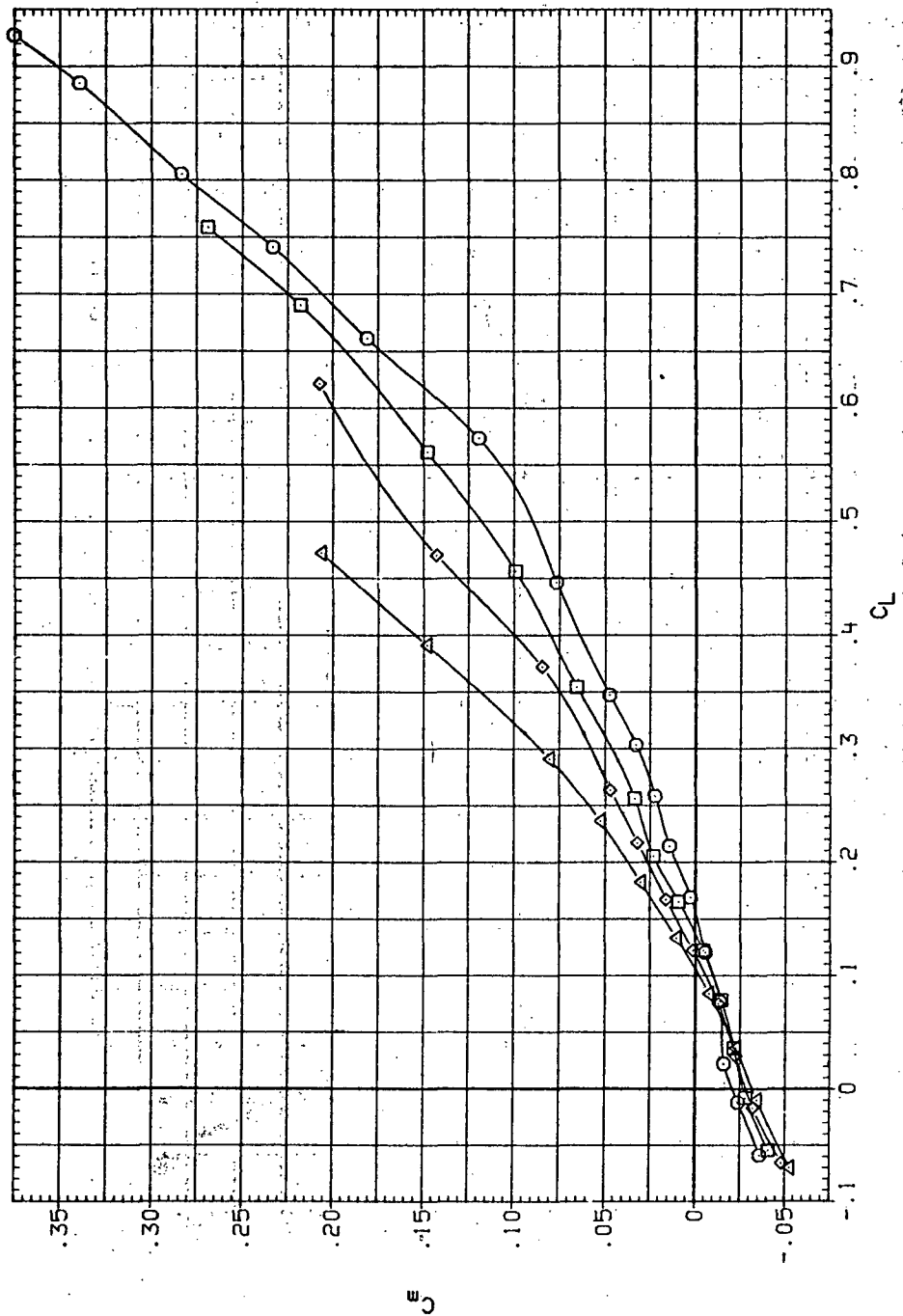


(b) C_D vs C_L

Figure 28.— Continued.

DATA SET SYMBOL CONFIGURATION
 R0030 ○ 94556 (AL)
 R0070 □ 94556 (AL)
 R0110 △ 94556 (AL)
 R0149 △ 94556 (AL)

RV/L Q (NSM)
 3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800

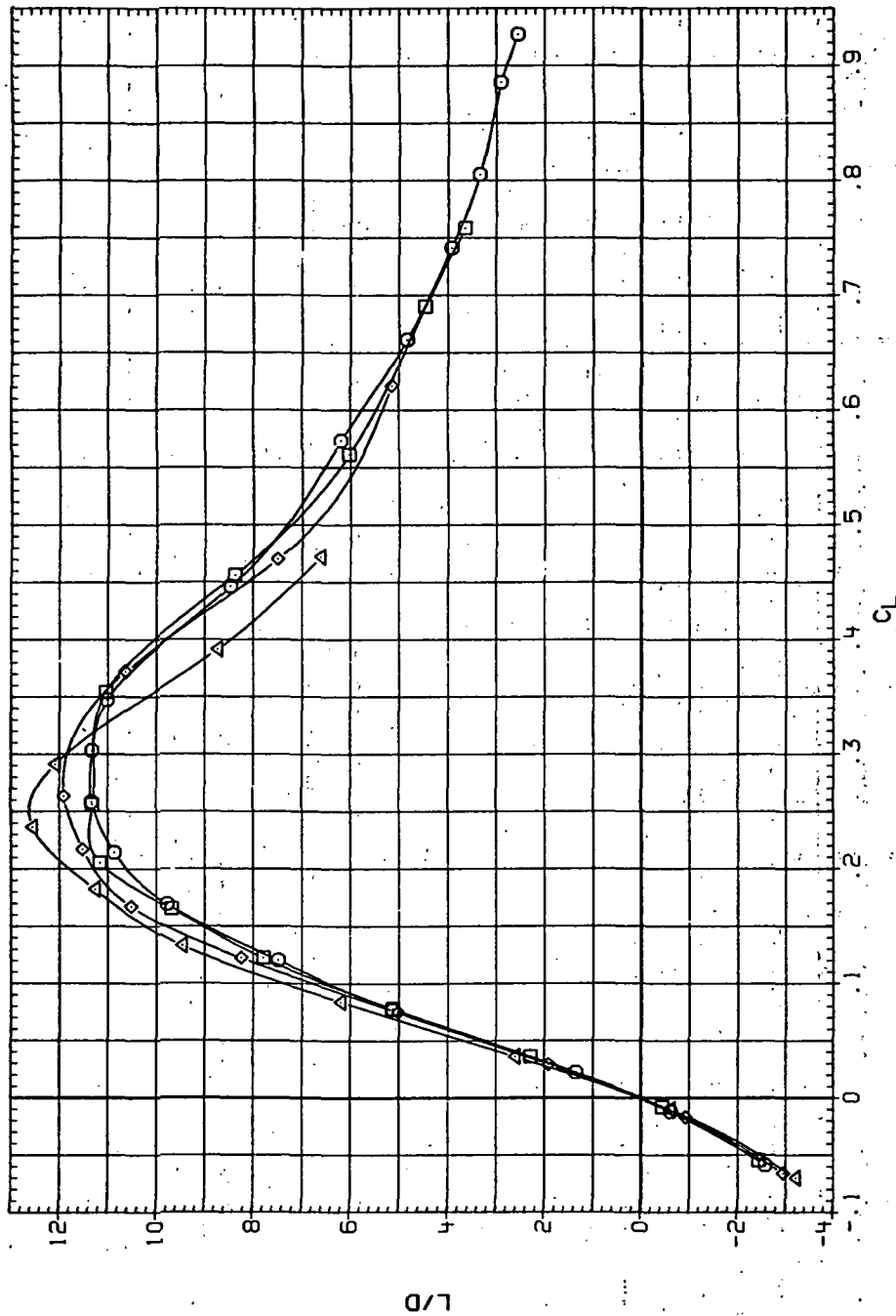


(c) C_m vs C_L .

Figure 28.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR030 94558 (AL)
 RJR070 94558 (AL)
 RJR110 94558 (AL)
 RJR149 94558 (AL)

RN/L Q(NSH)
 3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800



(d) L/D vs C_L

Figure 28.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR030 $\square$ SM558 (AL)
 RJR070 $\square$ SM558 (AL)
 RJR110 $\square$ SM558 (AL)
 RJR149 $\square$ SM558 (AL)

RN/L

Q(NSM)

3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800

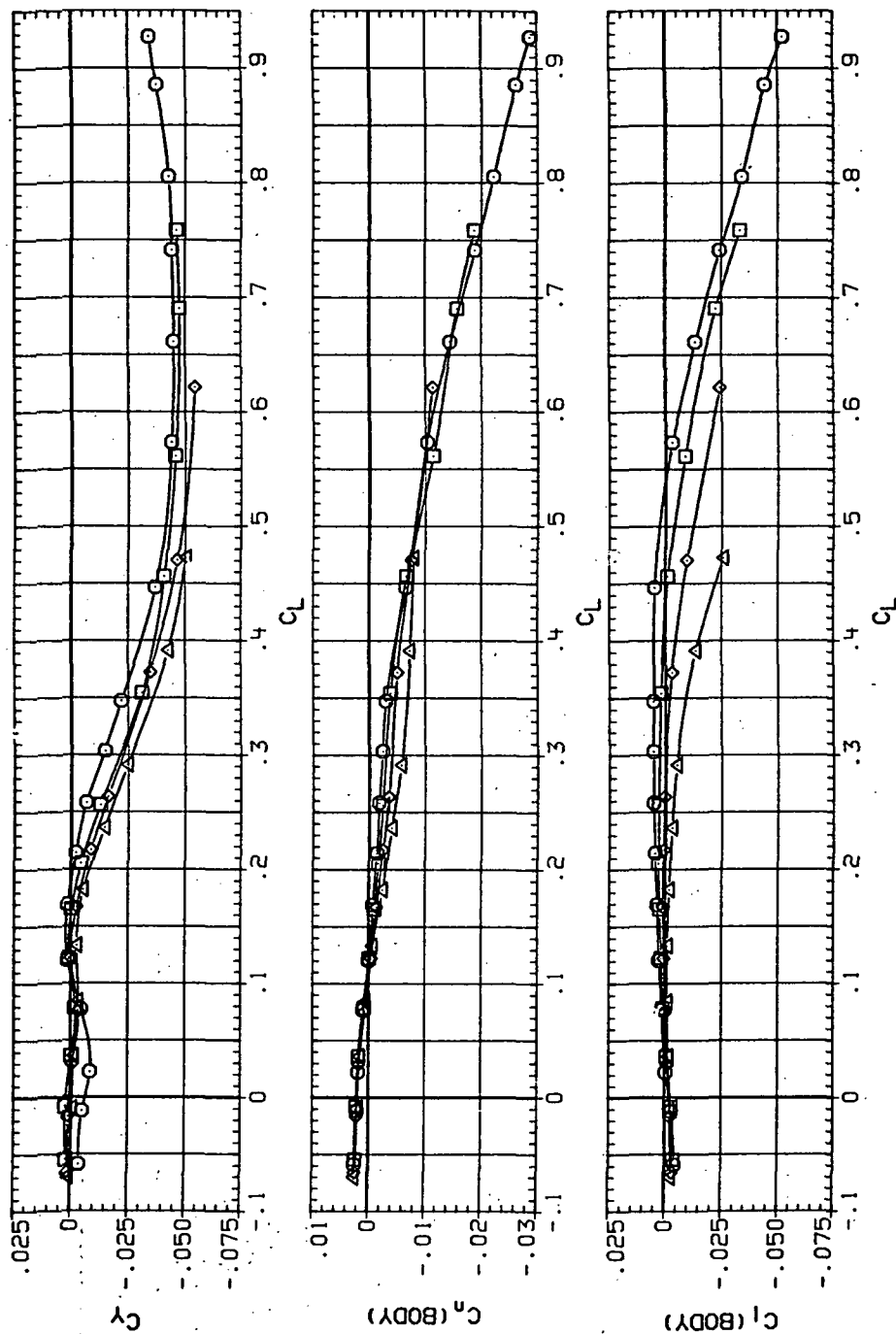
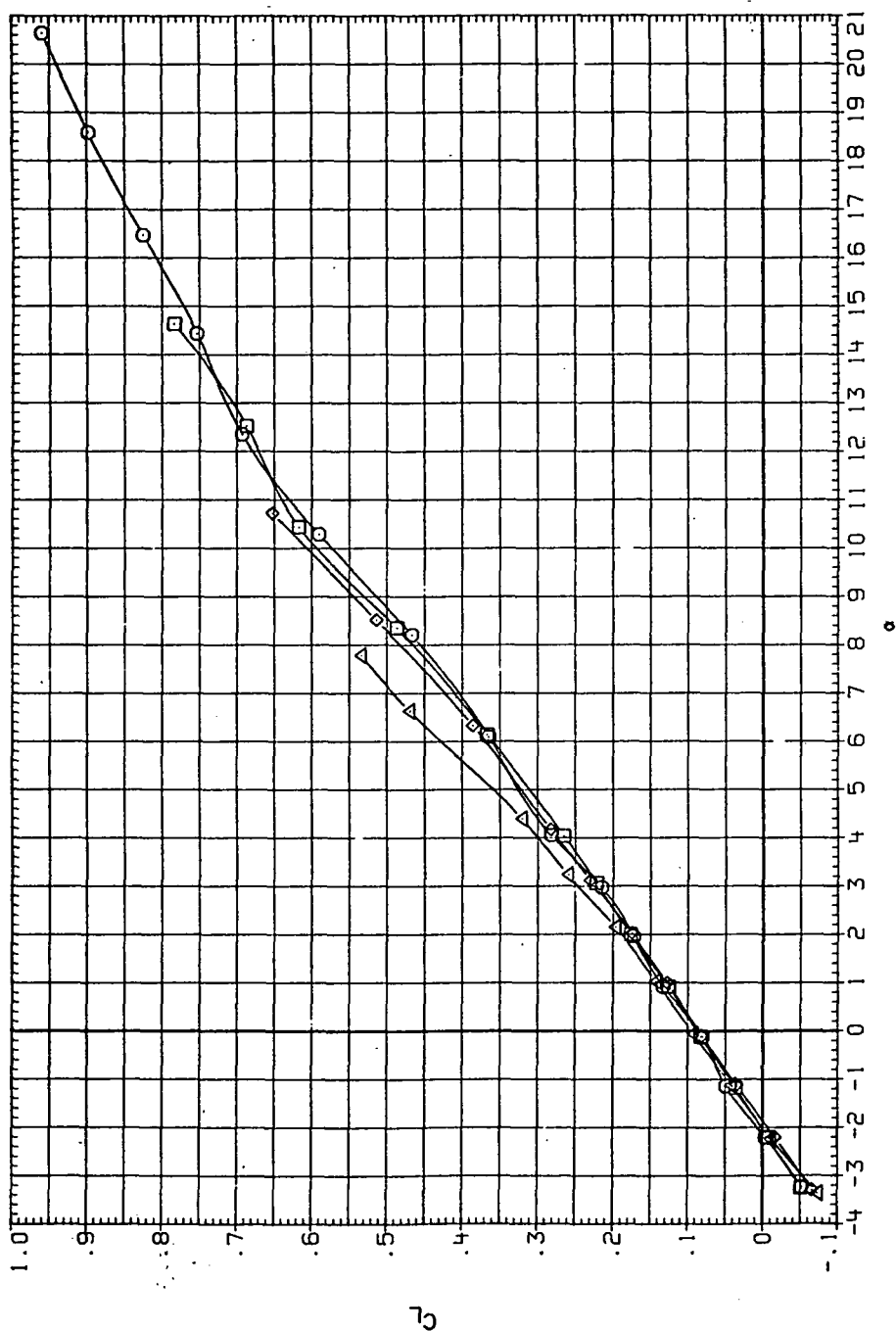
(e) C_Y , C_n and C_l vs C_L .

Figure 28.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR031 $\square$ 9455B (AL)
 RJR071 $\square$ 9455B (AL)
 RJR111 $\diamond$ 9455B (AL)
 RJR150 $\triangle$ 9455B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

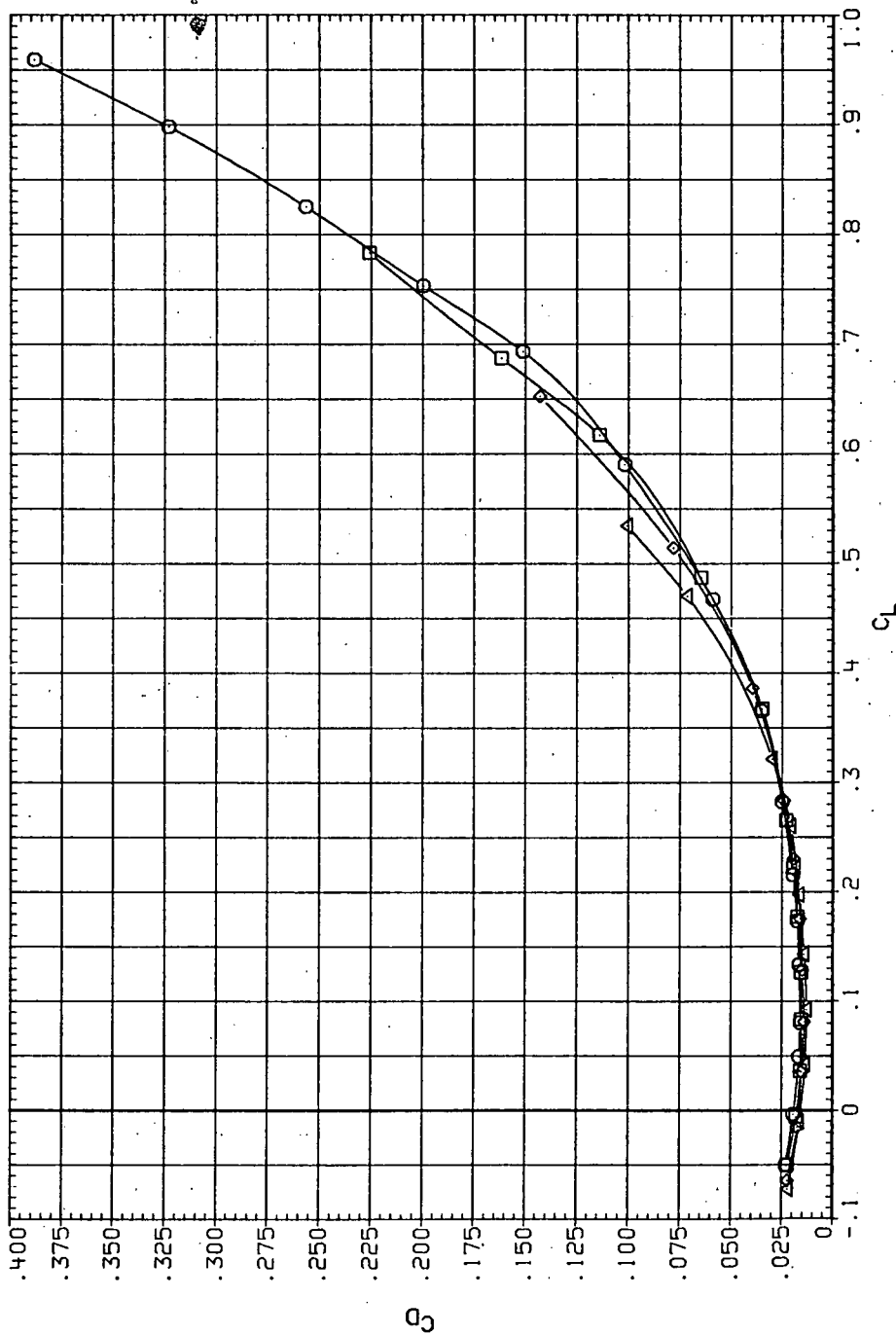


(a) C_L vs α .

Figure 29.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.9$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR031 ○ 9W55B (AL)
 RJR071 □ 9W55B (AL)
 RJR111 ◇ 9W55B (AL)
 RJR150 △ 9W55B (AL)

RN/L Q(NSM)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

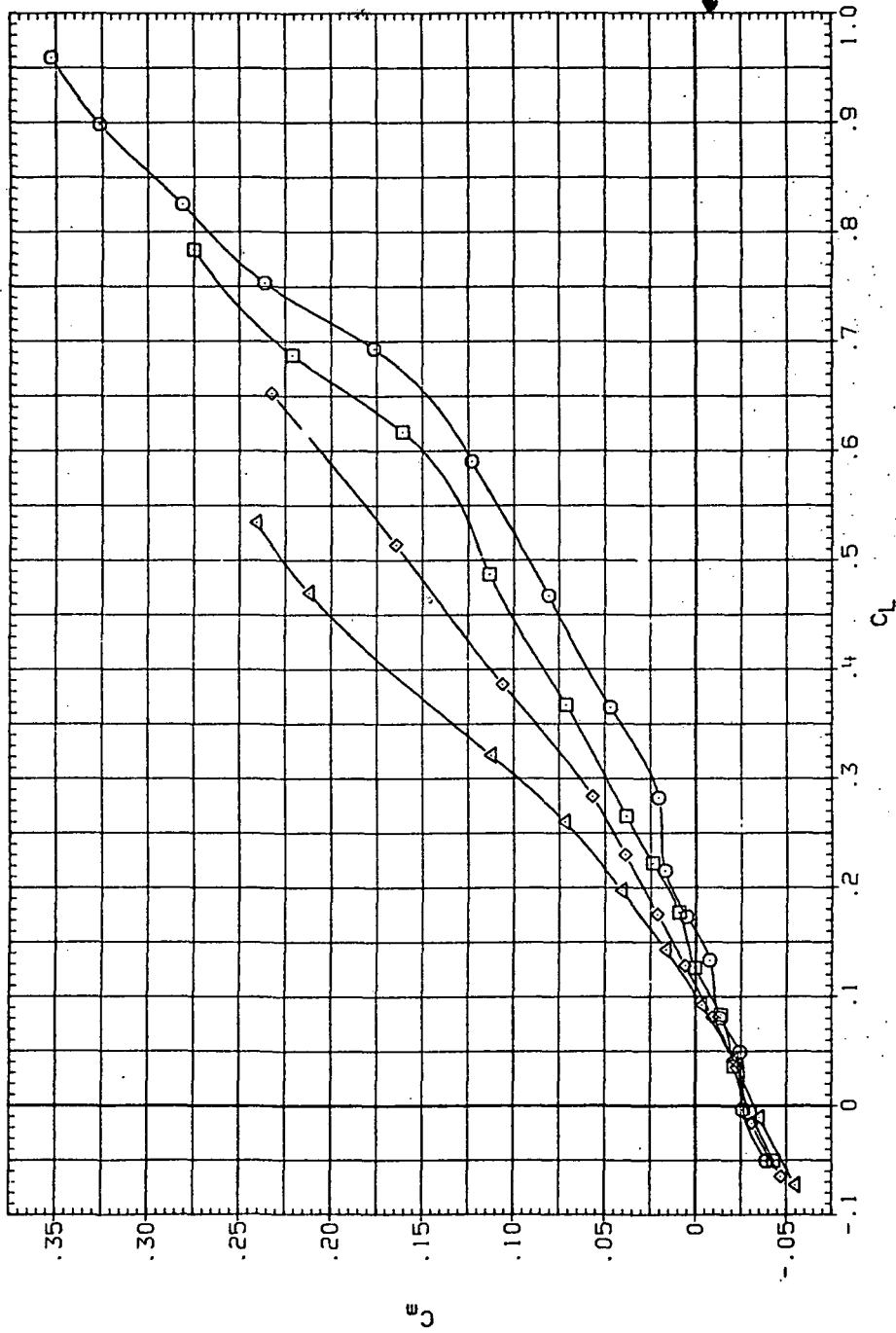


(b) C_D vs C_L .

Figure 29.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR031 ◻ 9M55B (AL)
 RJR071 ◻ 9M55B (AL)
 RJR111 ◻ 9M55B (AL)
 RJR150 ◻ 9M55B (AL)

RM/L Q(NSM)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

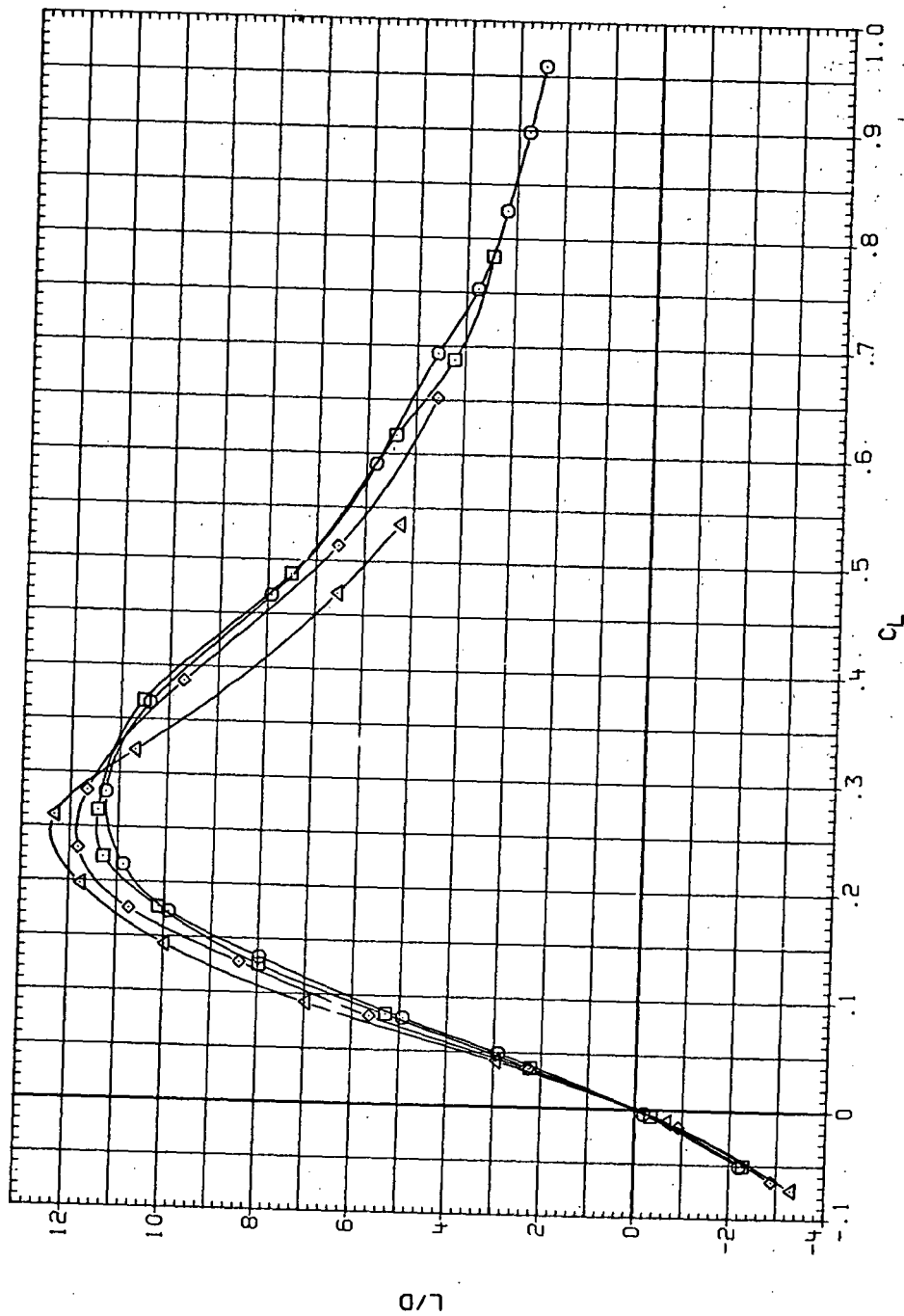


(c) C_m vs C_L

Figure 29. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR031 □ 9455B (AL)
 RJR071 ○ 9455B (AL)
 RJR111 △ 9455B (AL)
 RJR150 ◇ 9455B (AL)

RM/L Q (INCH)
 3.260 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

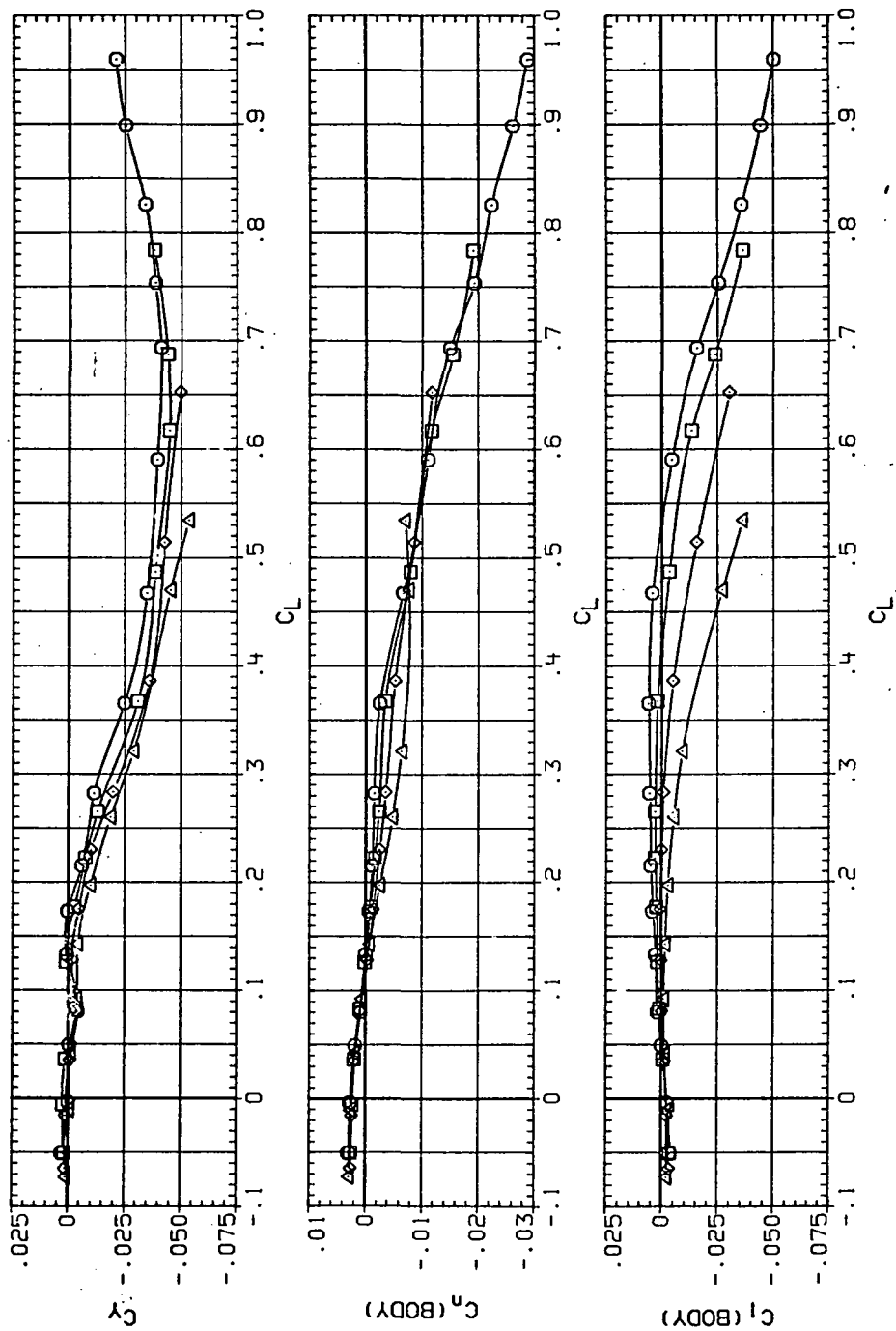


(d) L/D vs C_L .

Figure 29.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP031 ○ 9455B (AL)
 RUP071 □ 9455B (AL)
 RUP111 ◇ 9455B (AL)
 RUP150 △ 9455B (AL)

RN/L Q(NSM)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200



(e) C_Y , C_n and C_l vs C_L .

Figure 29.- Concluded.

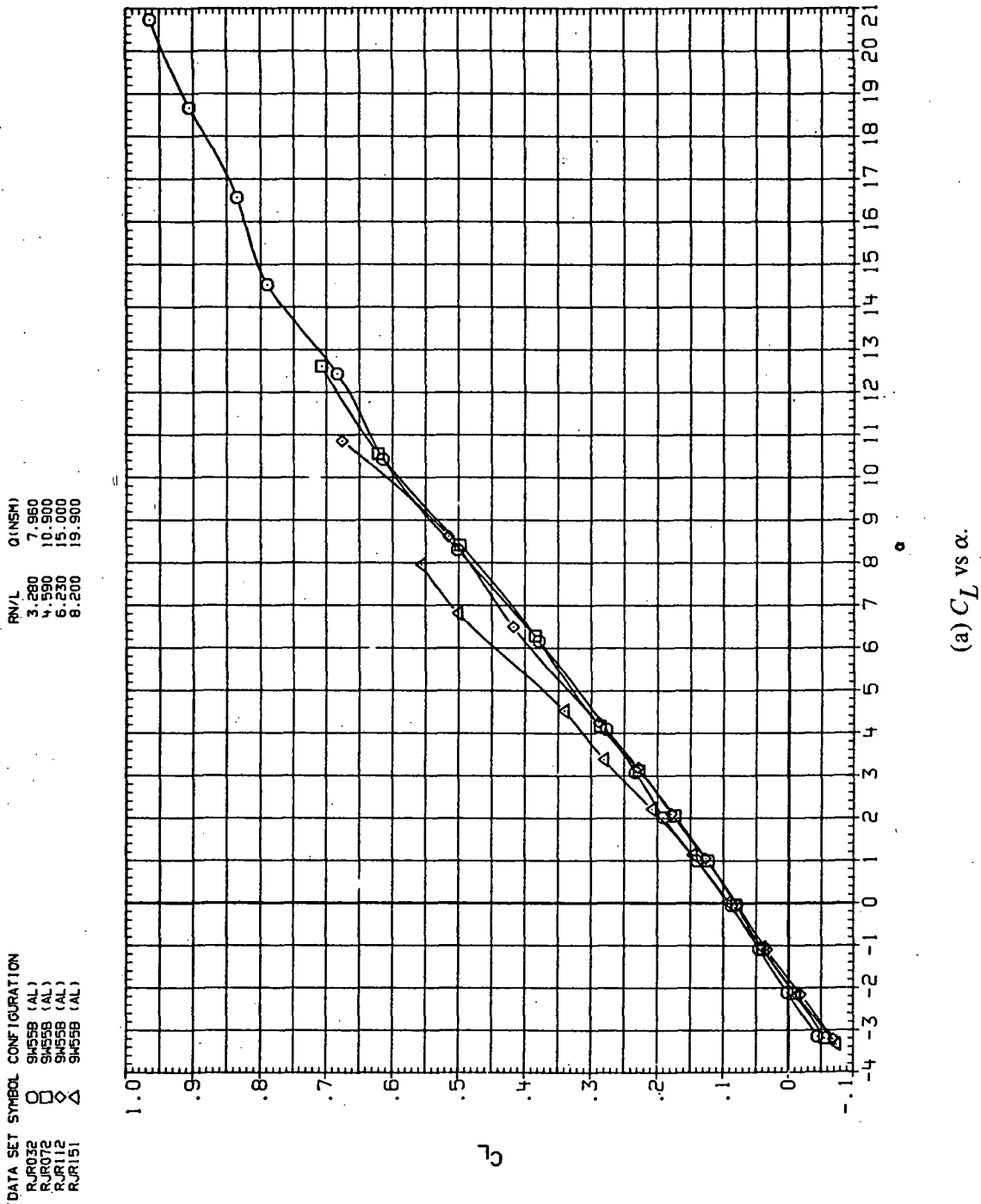
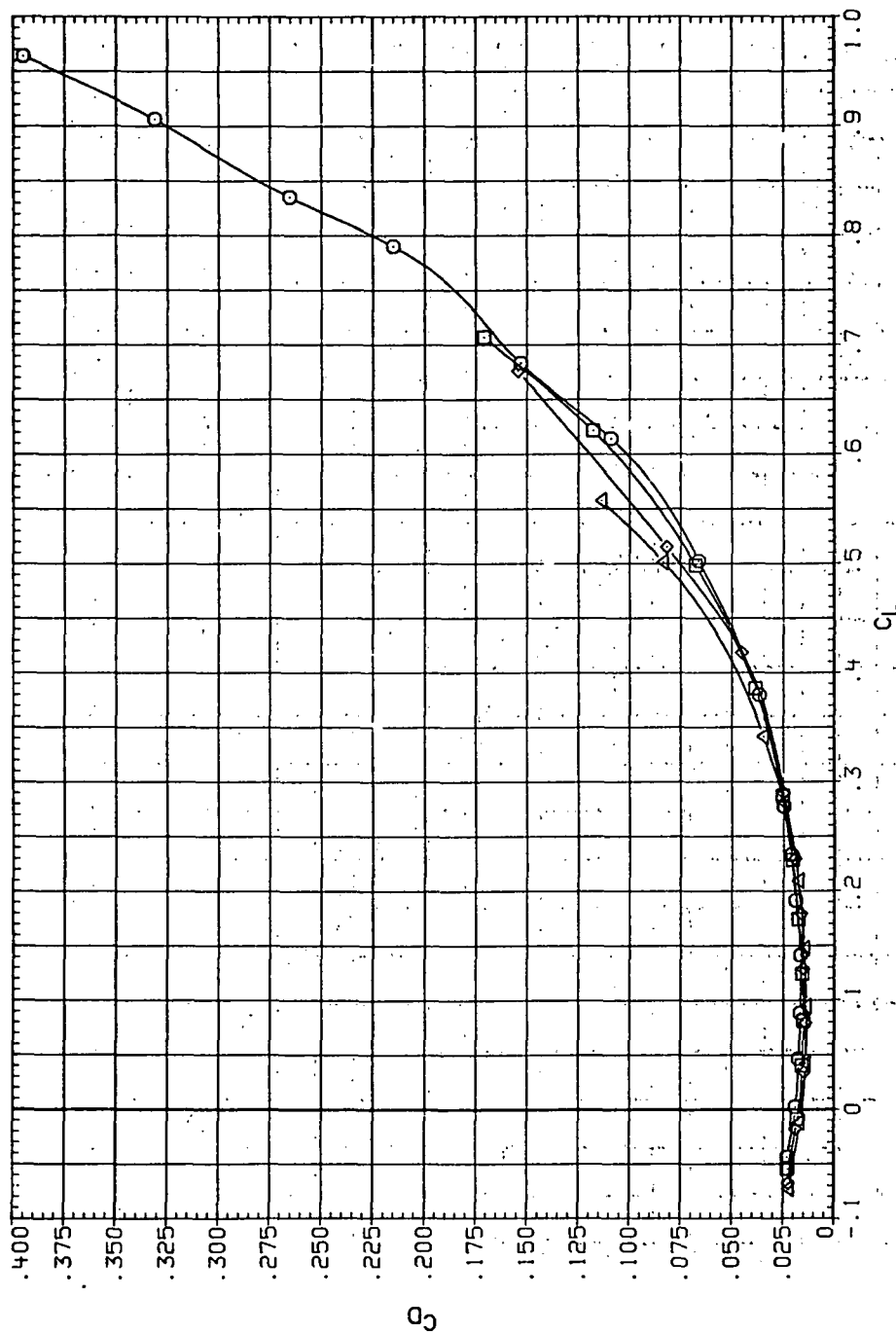


Figure 30.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.95$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR032 ◯ SH558 (AL)
 RJR072 ◻ SH558 (AL)
 RJR112 ◇ SH558 (AL)
 RJR151 △ SH558 (AL)

RV/L Q (NSM)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

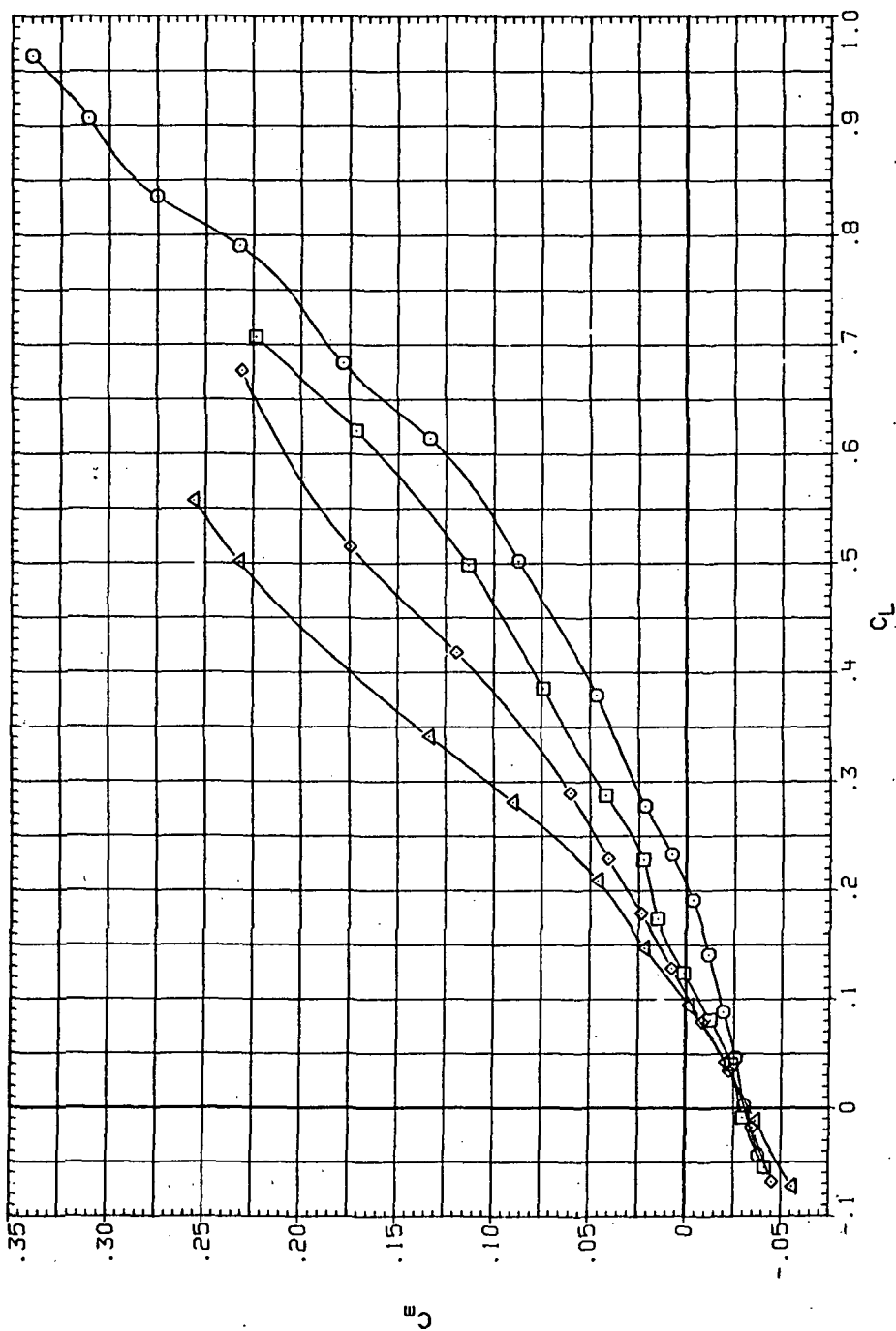


(b) C_D vs C_L .

Figure 30. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR032 $\square$ 9M55B (AL)
 RJR072 $\square$ 9M55B (AL)
 RJR112 $\square$ 9M55B (AL)
 RJR151 $\square$ 9M55B (AL)

RN/L Q(NSW)
 3.260 7.960
 4.500 10.900
 6.250 15.000
 8.200 19.900

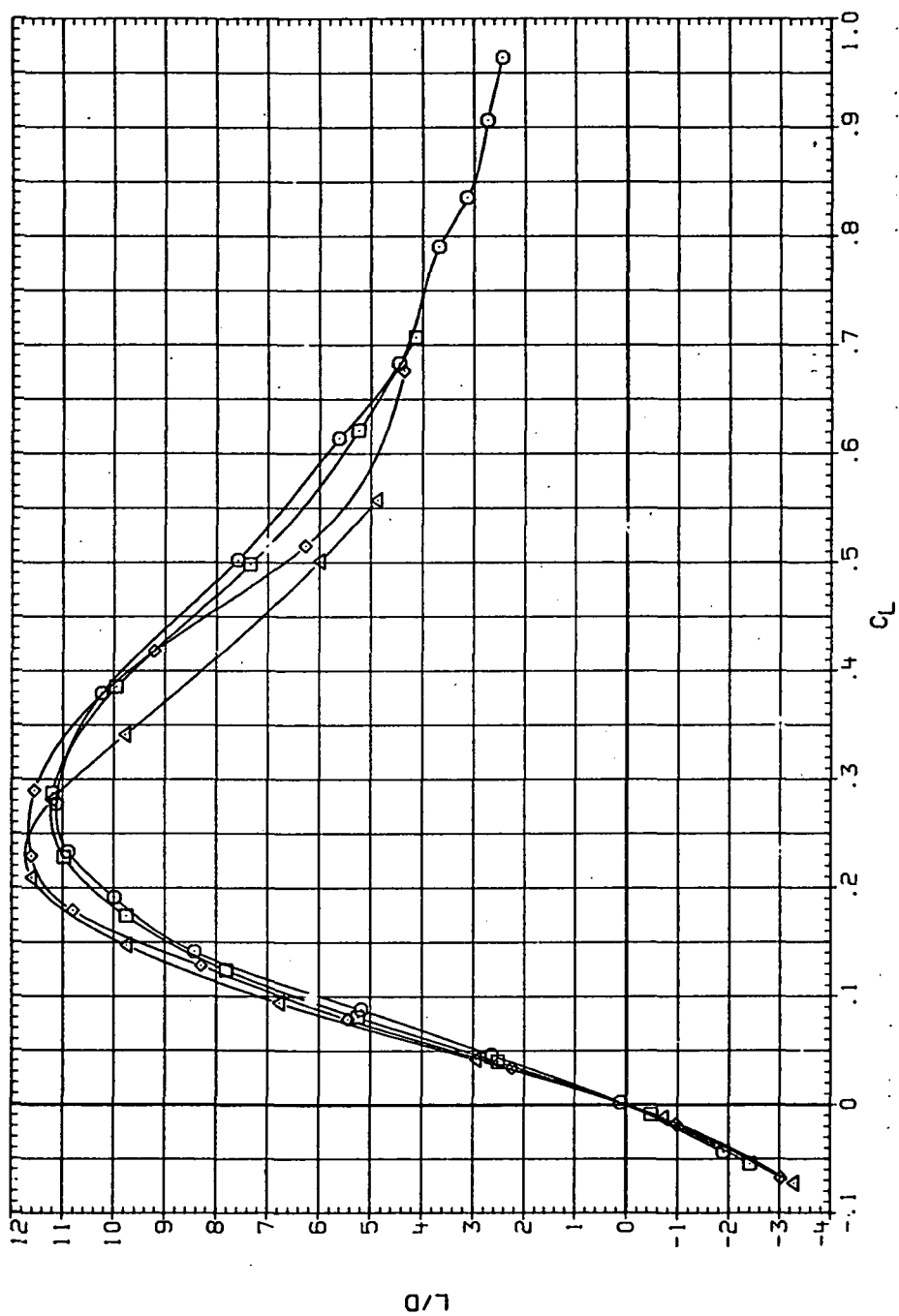


(c) C_m vs C_L .

Figure 30.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR032 □ 5H55B (AL)
 RJR072 ◇ 5H55B (AL)
 RJR112 △ 5H55B (AL)
 RJR151 △ 5H55B (AL)

RN/L Q(NSH)
 3.260 7.950
 4.590 10.500
 6.230 13.000
 8.200 15.900



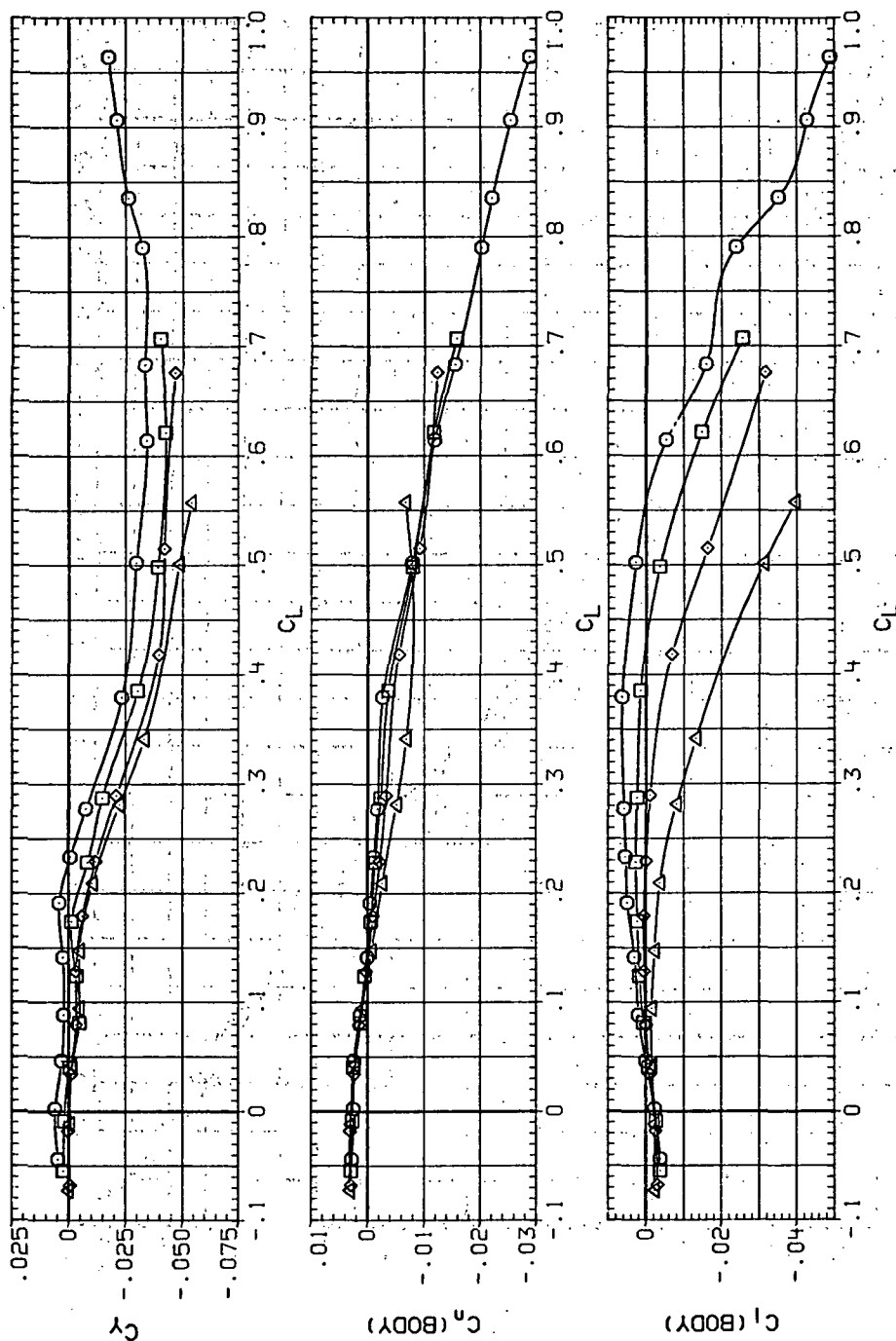
(d) L/D vs C_L .

Figure 30.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR032 ○ 94558 (AL)
 RJR072 □ 94558 (AL)
 RJR112 ◇ 94558 (AL)
 RJR151 △ 94558 (AL)

RN/L Q(NSH)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

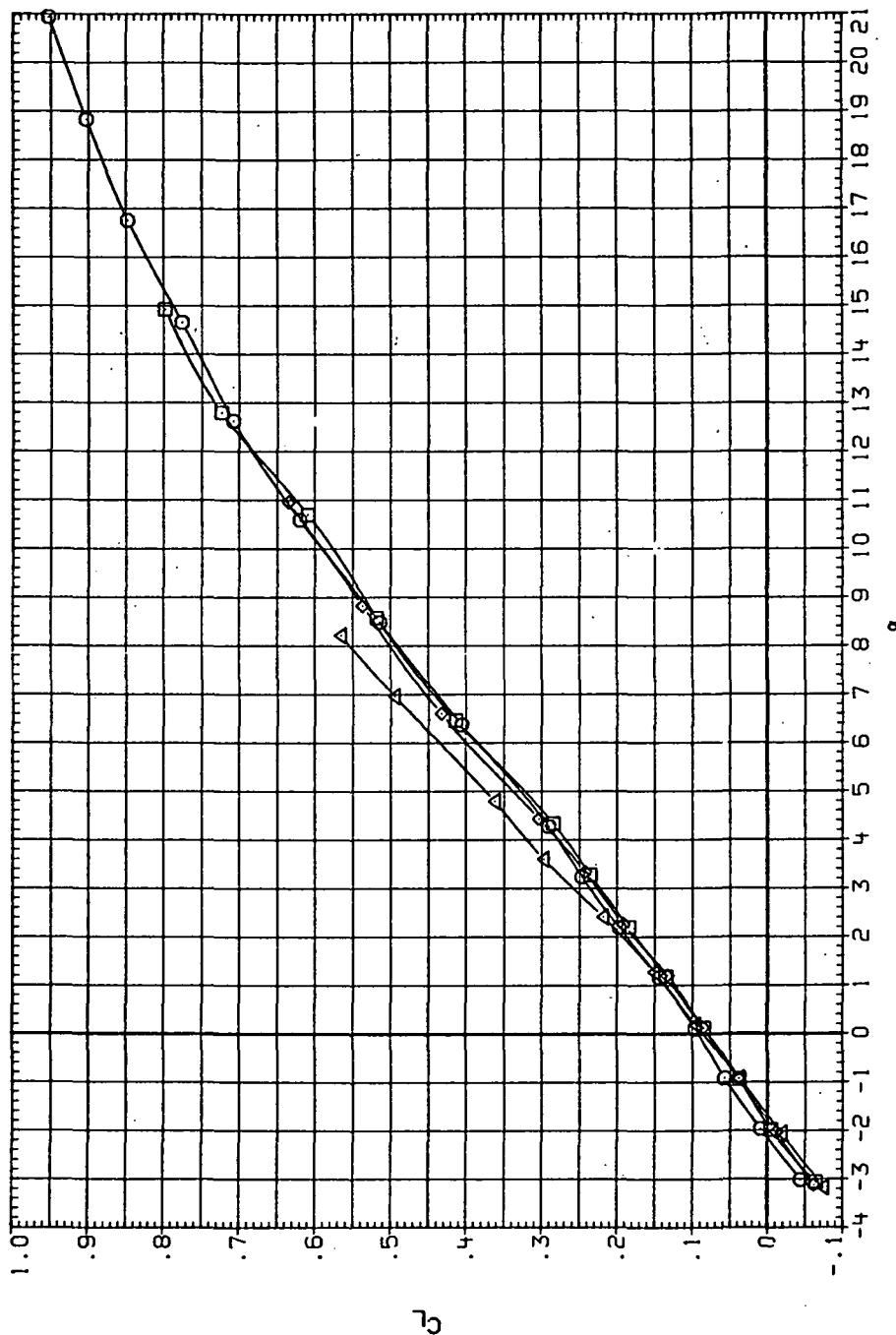


(e) C_Y , C_n and C_l vs C_L .

Figure 30.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR033 $\square$ 34558 (AL)
 RJR073 $\square$ 34558 (AL)
 RJR113 $\square$ 34558 (AL)
 RJR152 $\square$ 34558 (AL)

RN/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

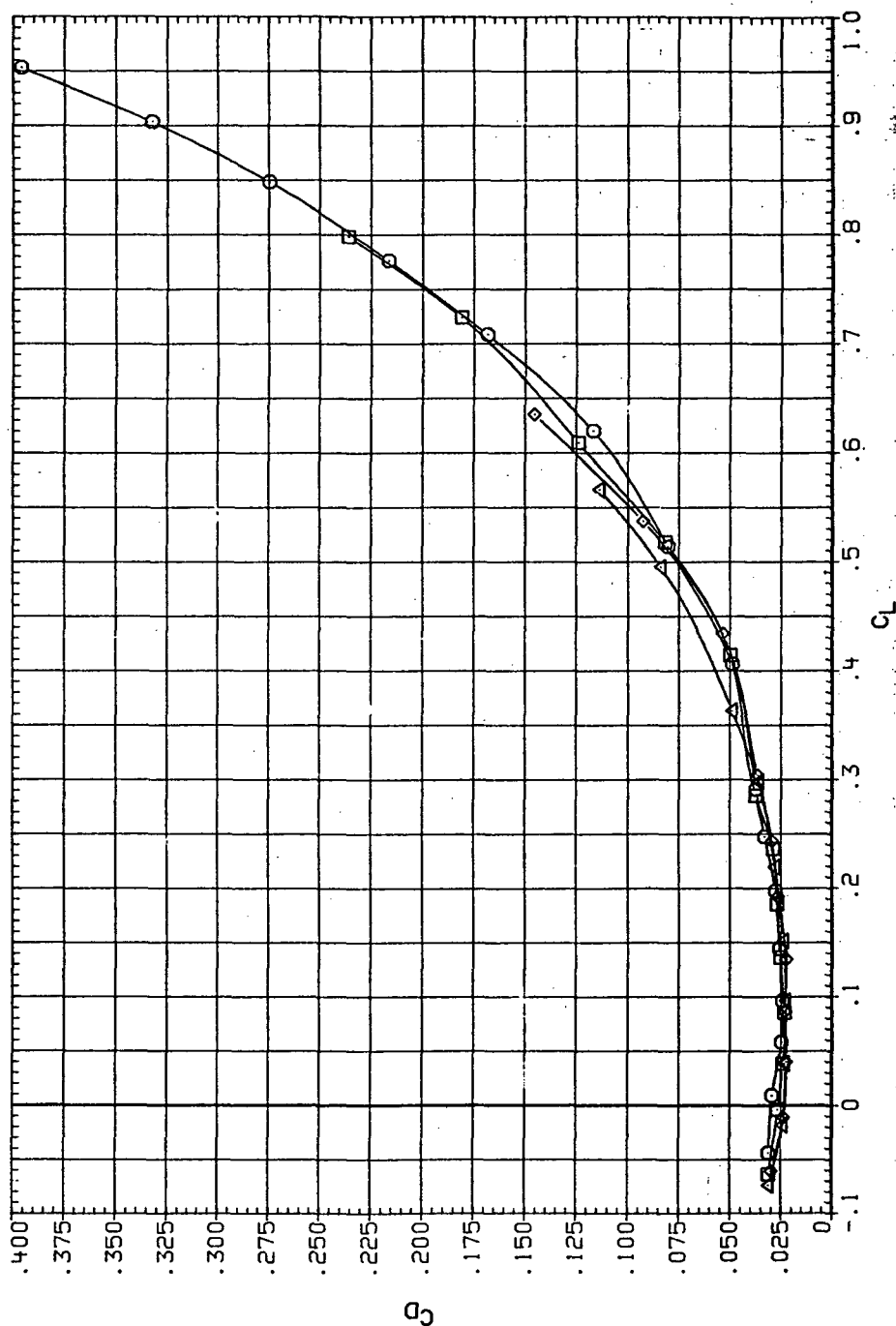


(a) C_L vs α .

Figure 31.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.1$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR033 ○ 9455B (AL)
 RJR073 □ 9455B (AL)
 RJR113 △ 9455B (AL)
 RJR152 ◇ 9455B (AL)

RN/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.900
 8.200 21.200

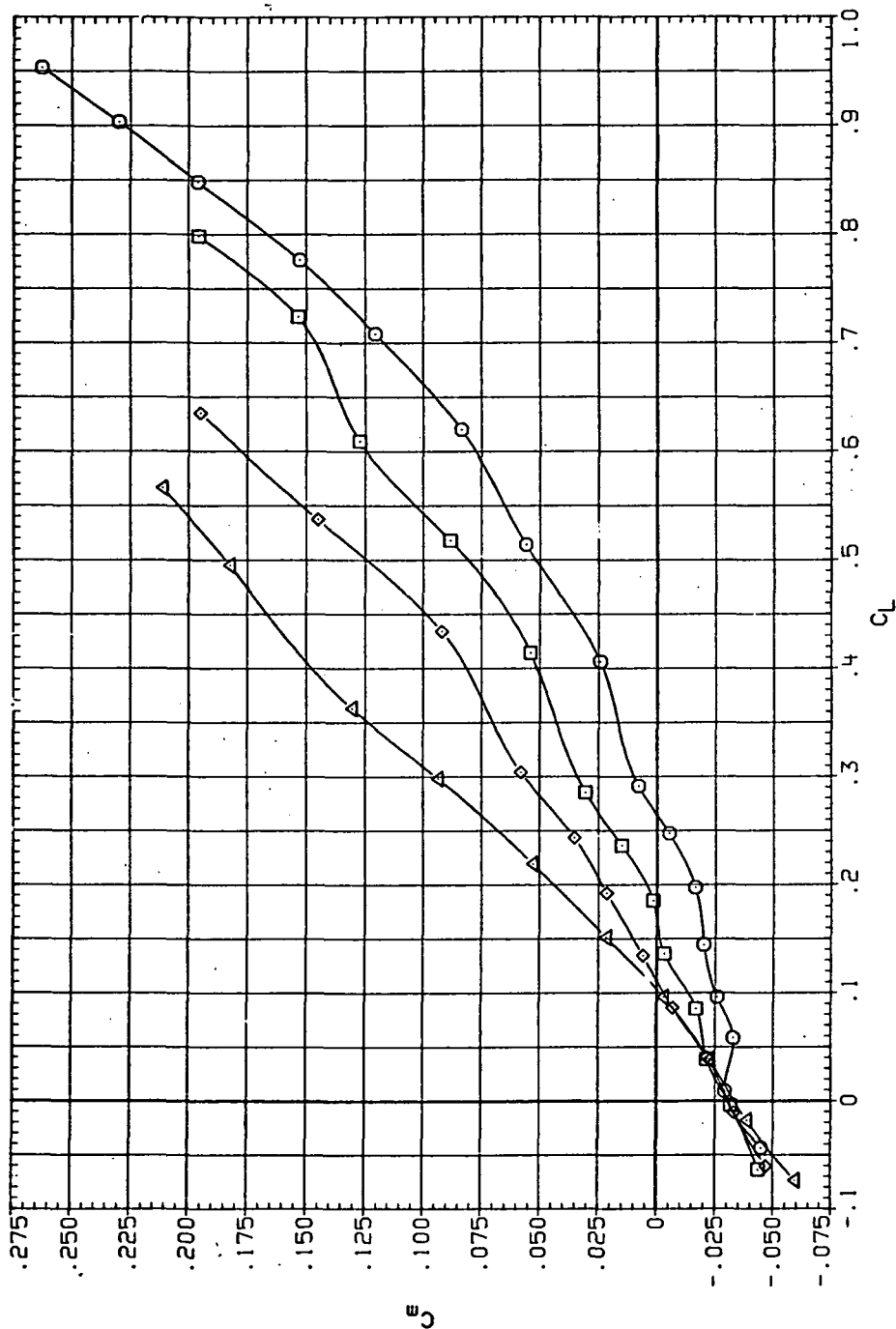


(b) C_D vs C_L .

Figure 31.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR033 ○ 9455B (AL)
 RJR073 □ 9455B (AL)
 RJR113 △ 9455B (AL)
 RJR152 ◇ 9455B (AL)

RN/L Q (NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

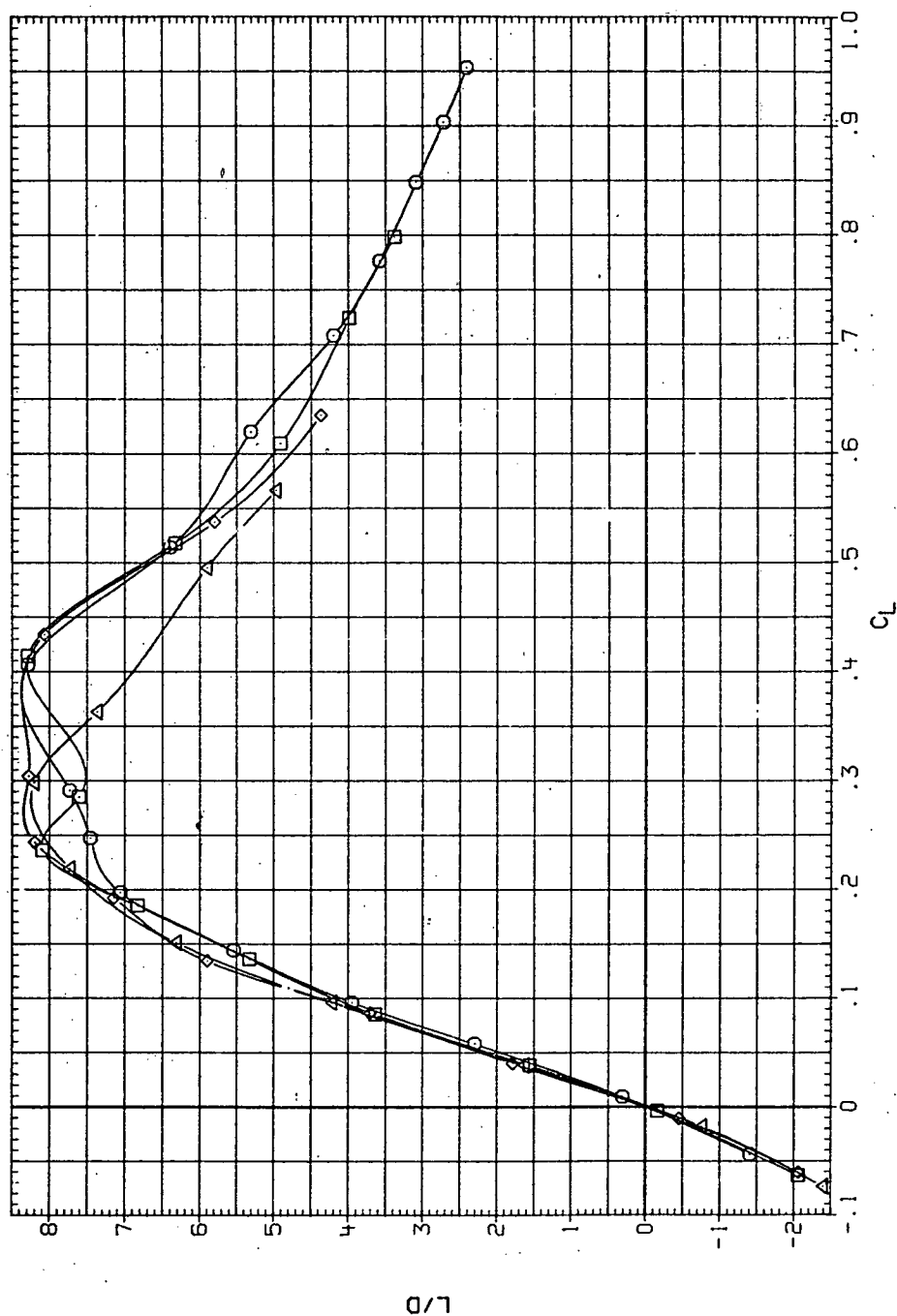


(c) C_m vs C_L .

Figure 31.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP033 ○ 9455B (AL)
 RUP073 □ 9455B (AL)
 RUP113 ◇ 9455B (AL)
 RUP152 △ 9455B (AL)

RN/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 15.400
 8.200 21.200

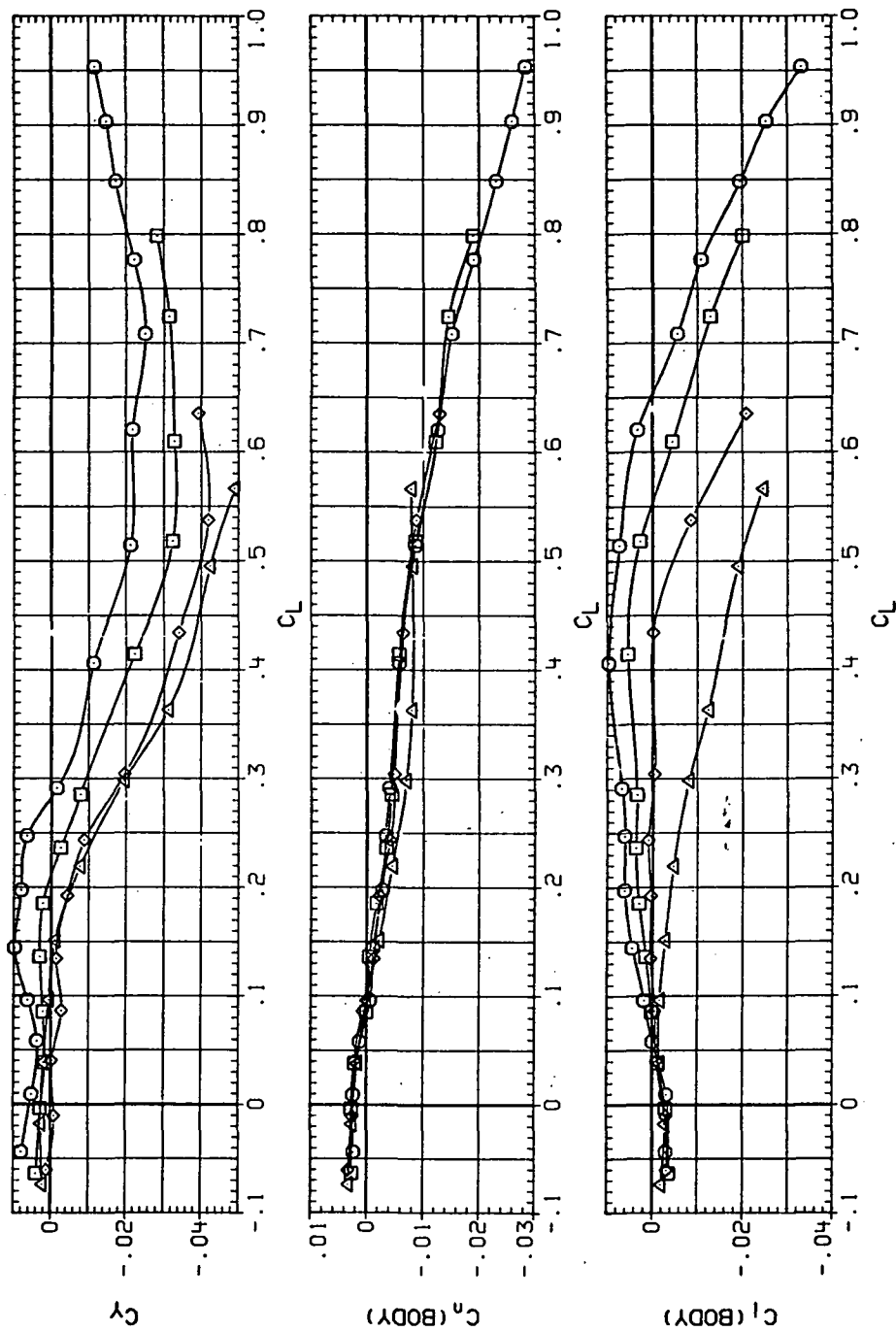


(d) L/D vs C_L .

Figure 31.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR033 94558 (AL) ○
 RJR073 94558 (AL) □
 RJR113 94558 (AL) ◇
 RJR152 94558 (AL) △

RN/L Q(NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200



(e) C_Y , C_n and C_l vs C_L .

Figure 31.— Concluded.

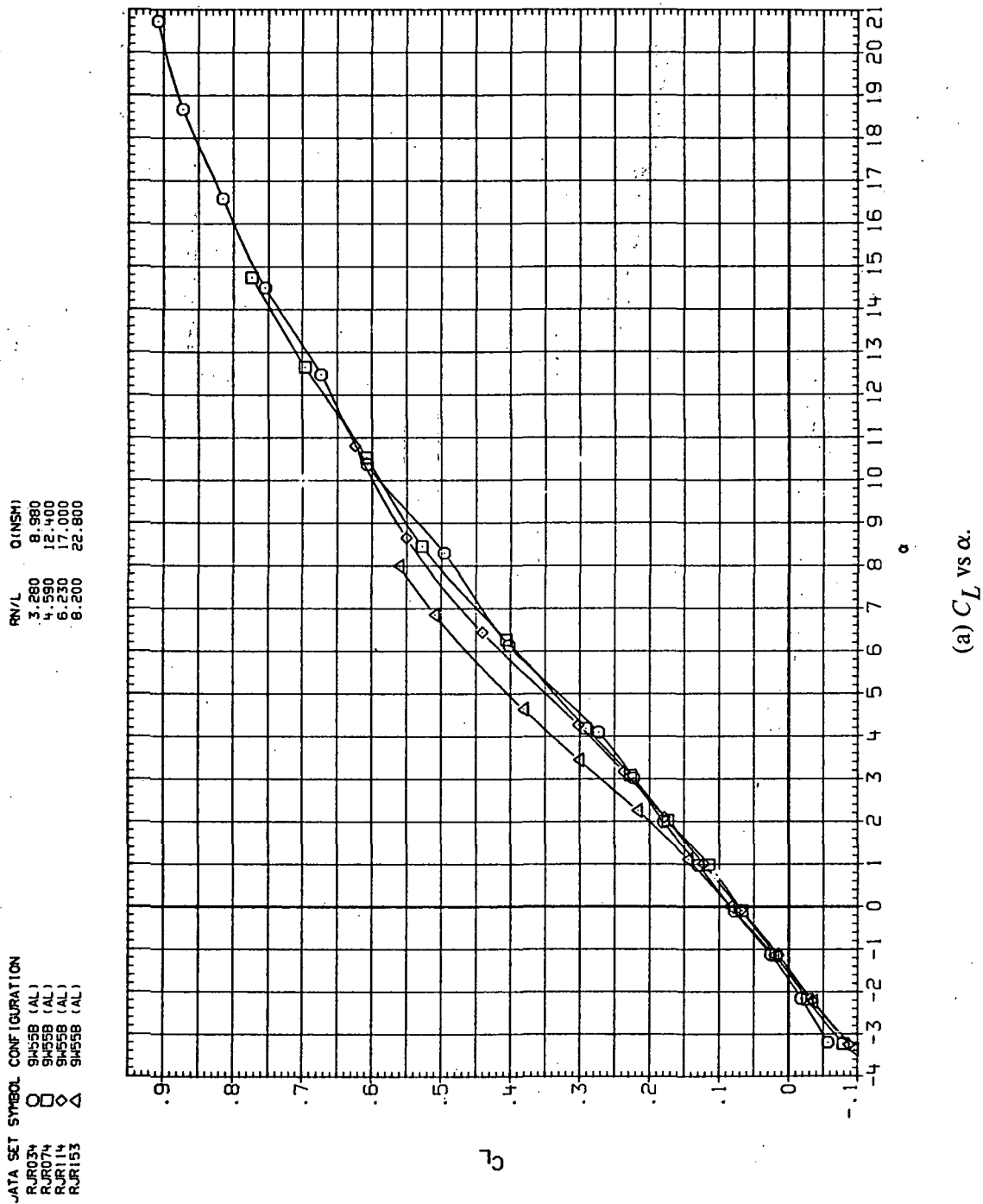
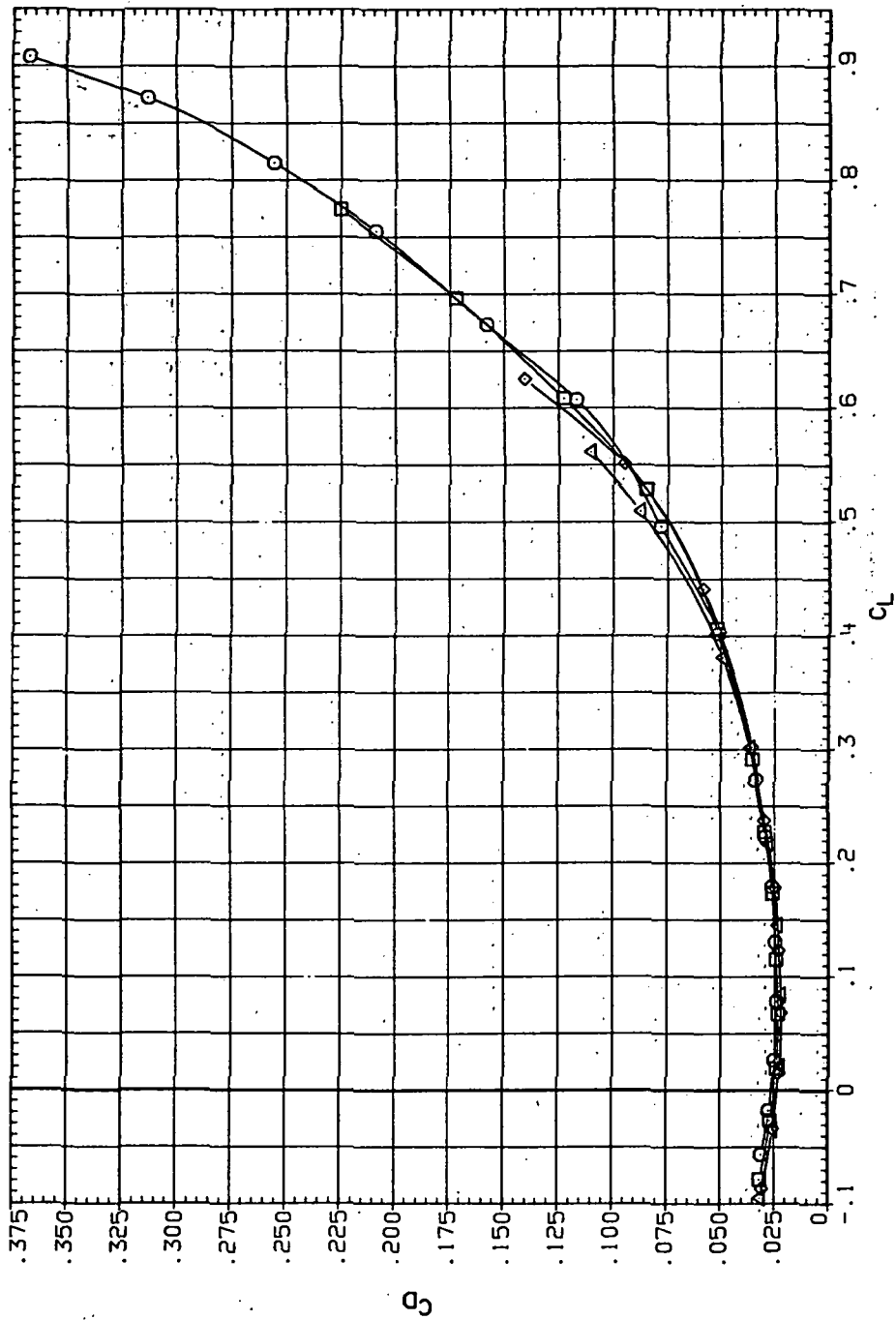


Figure 32. — Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.2$ and the modified NACA 65A204 airfoil).

ATA SET SYMBOL CONFIGURATION
 RUR034 9455B (AL)
 RUR074 9455B (AL)
 RUR114 9455B (AL)
 RUR153 9455B (AL)

RN/L $q(\text{NSH})$
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



(b) C_D vs C_L .

Figure 32.— Continued.

ITA SET SYMBOL CONFIGURATION

○ 94558 (AL)
 □ 94558 (AL)
 ◇ 94558 (AL)
 △ 94558 (AL)

RN/L Q(NSK)
 3.260 8.980
 4.580 12.400
 6.230 17.000
 8.200 22.800

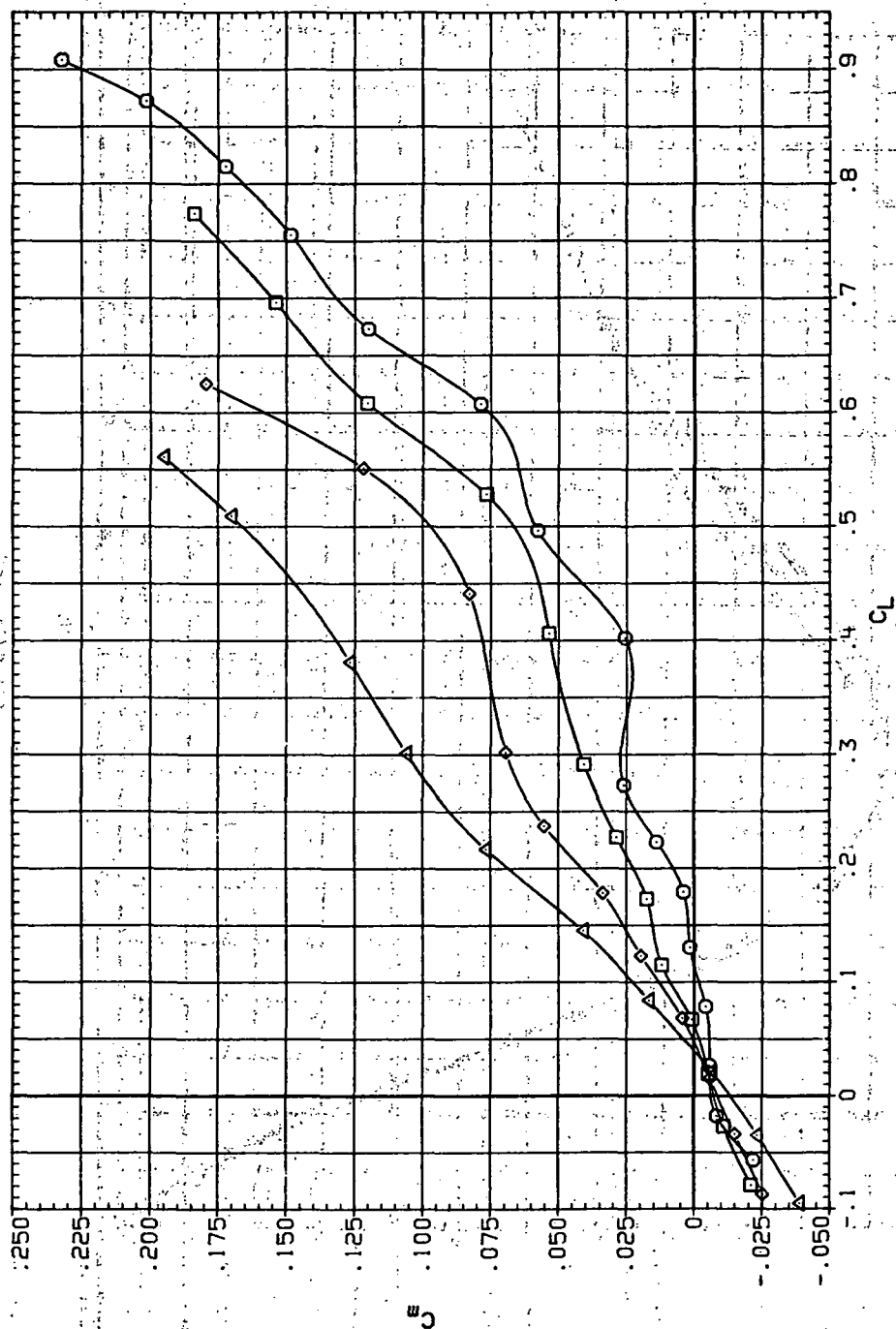
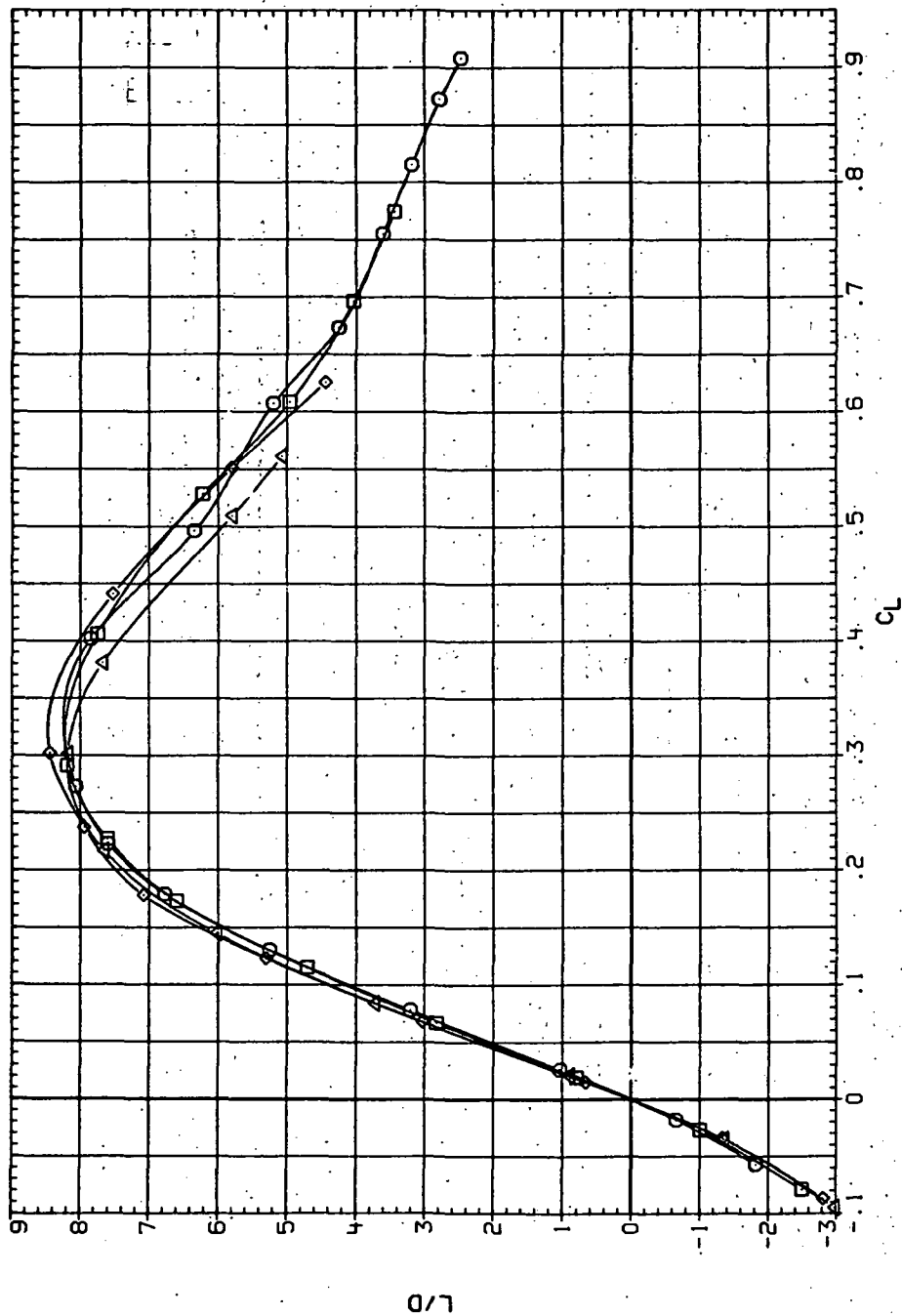
(c) C_m vs C_L

Figure 32. Continued.

DATA SET SYMBOL CONFIGURATION
 RJR034 94558 (AL)
 RJR074 94558 (AL)
 RJR114 94558 (AL)
 RJR153 94558 (AL)

RM/L Q (NSH)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.300 22.800



(d) L/D vs C_L .

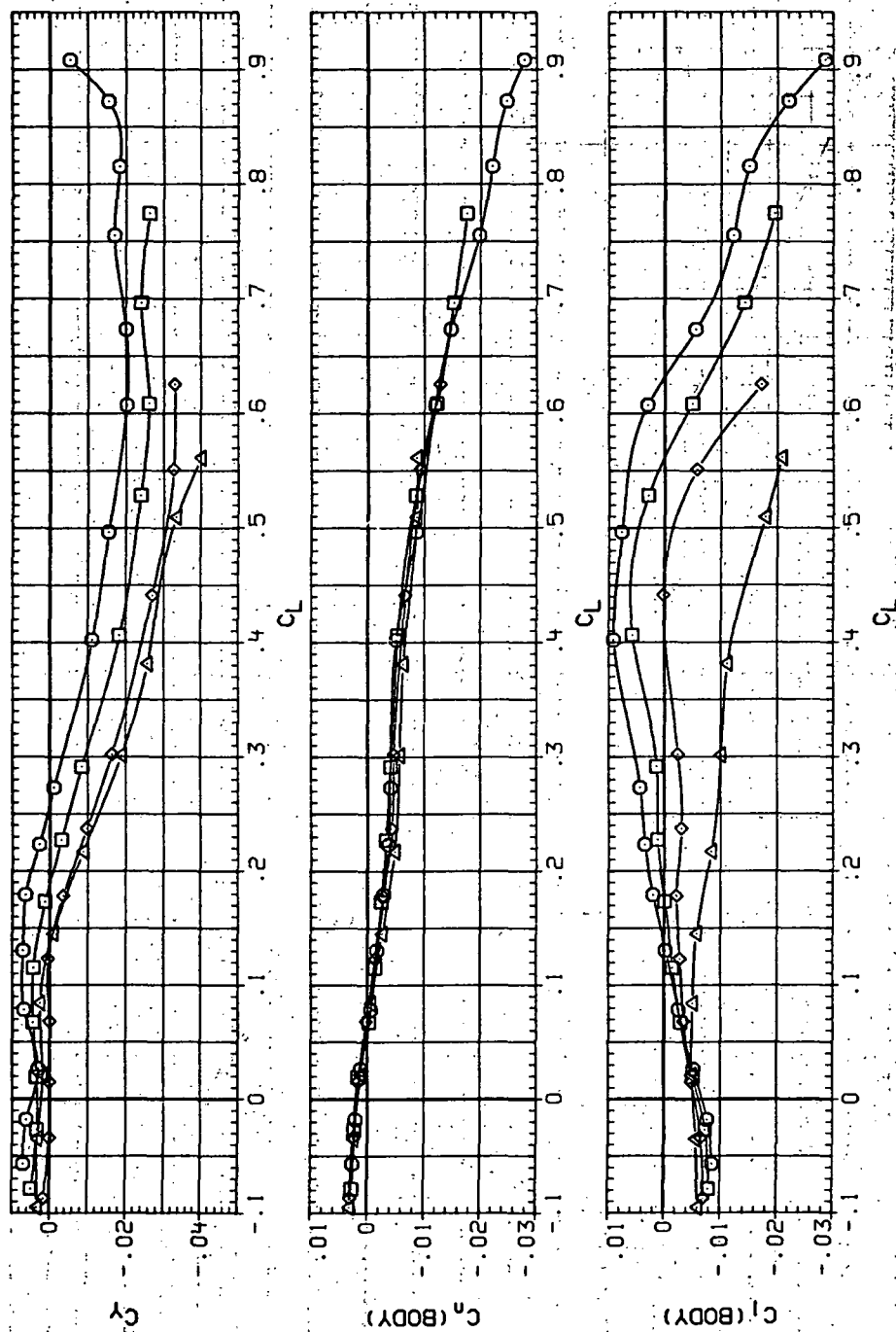
Figure 32.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR034 ○ 9H55B (AL)
 RJR074 □ 9H55B (AL)
 RJR114 ◇ 9H55B (AL)
 RJR153 △ 9H55B (AL)

RV/L Q (NSM)

3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800

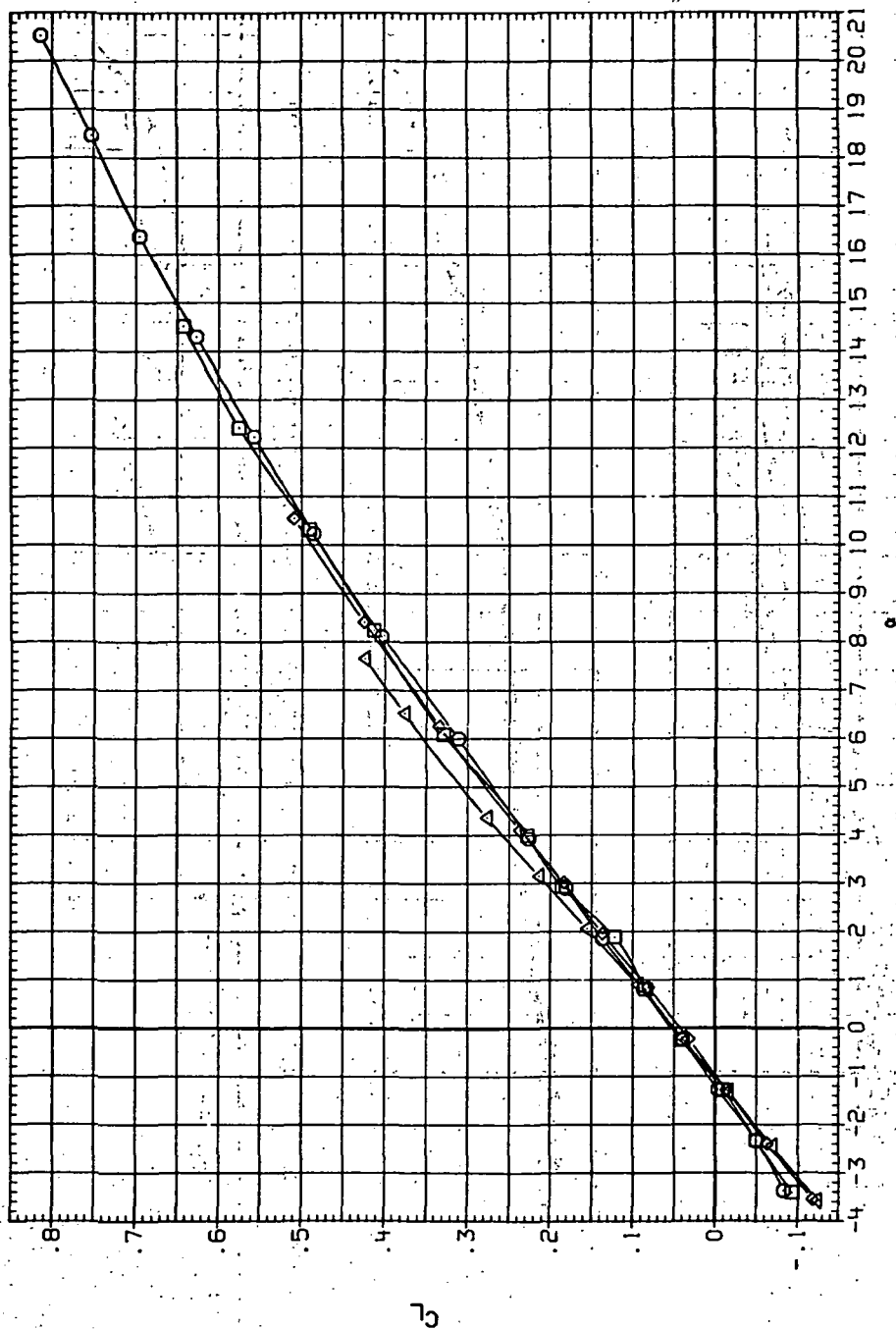


(e) C_Y , C_n and C_l vs C_L .

Figure 32. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJA035 ◯ 54558 (AL)
 RJA075 ◻ 54558 (AL)
 RJA115 ◊ 54558 (AL)
 RJA154 ◻ 54558 (AL)

RN/L Q(NSH)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

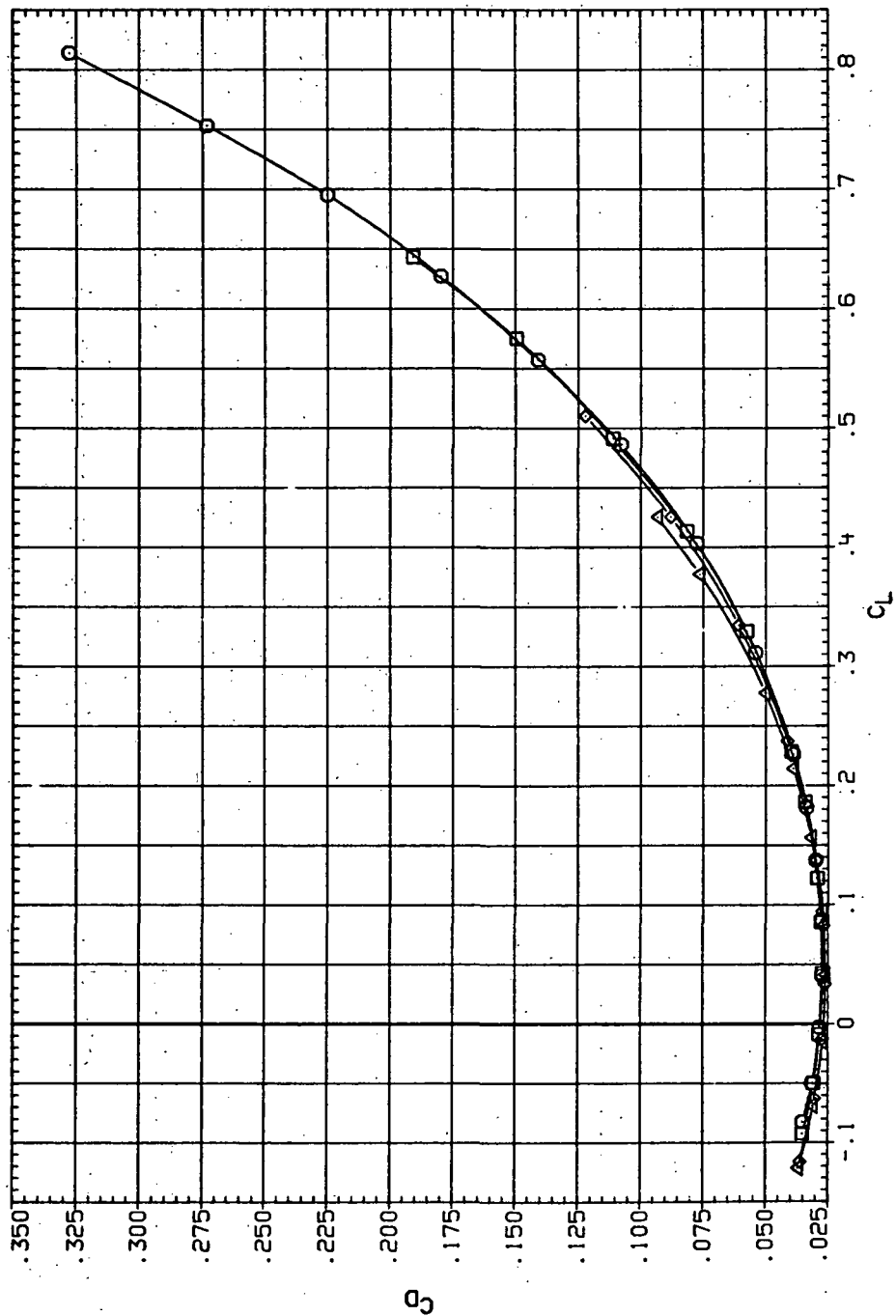


(a) C_L vs. α .

Figure 33.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR035 ○ 94558 (AL)
 RJR075 □ 94558 (AL)
 RJR115 ◇ 94558 (AL)
 RJR154 △ 94558 (AL)

RN/L Q(L,5M)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

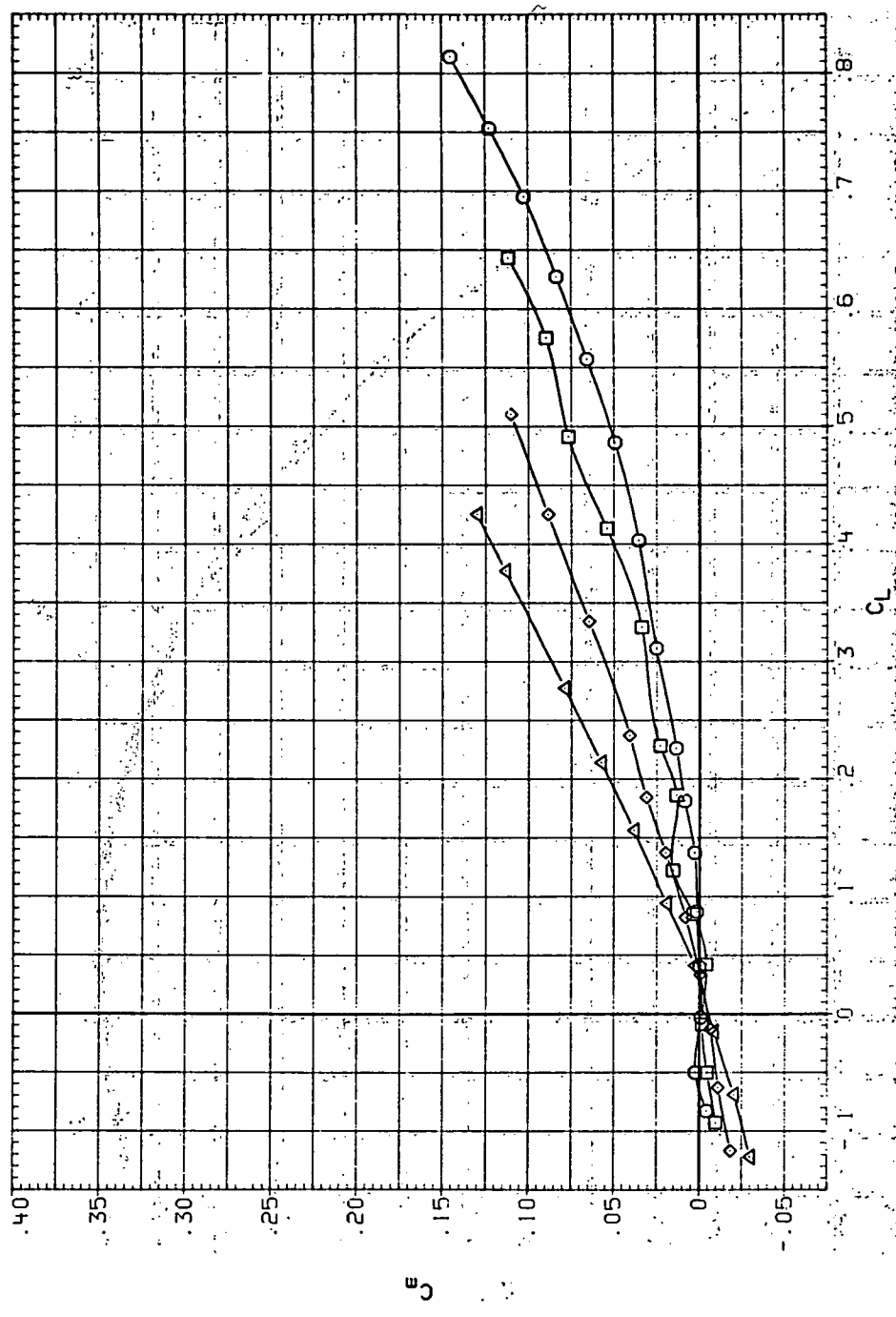


(b) C_D vs C_L .

Figure 33. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR035 ○ 94558 (AL)
 RJR075 □ 94558 (AL)
 RJR115 ◇ 94558 (AL)
 RJR154 △ 94558 (AL)

RN/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400



(c) C_m vs C_L
 Figure 33. — Continued.

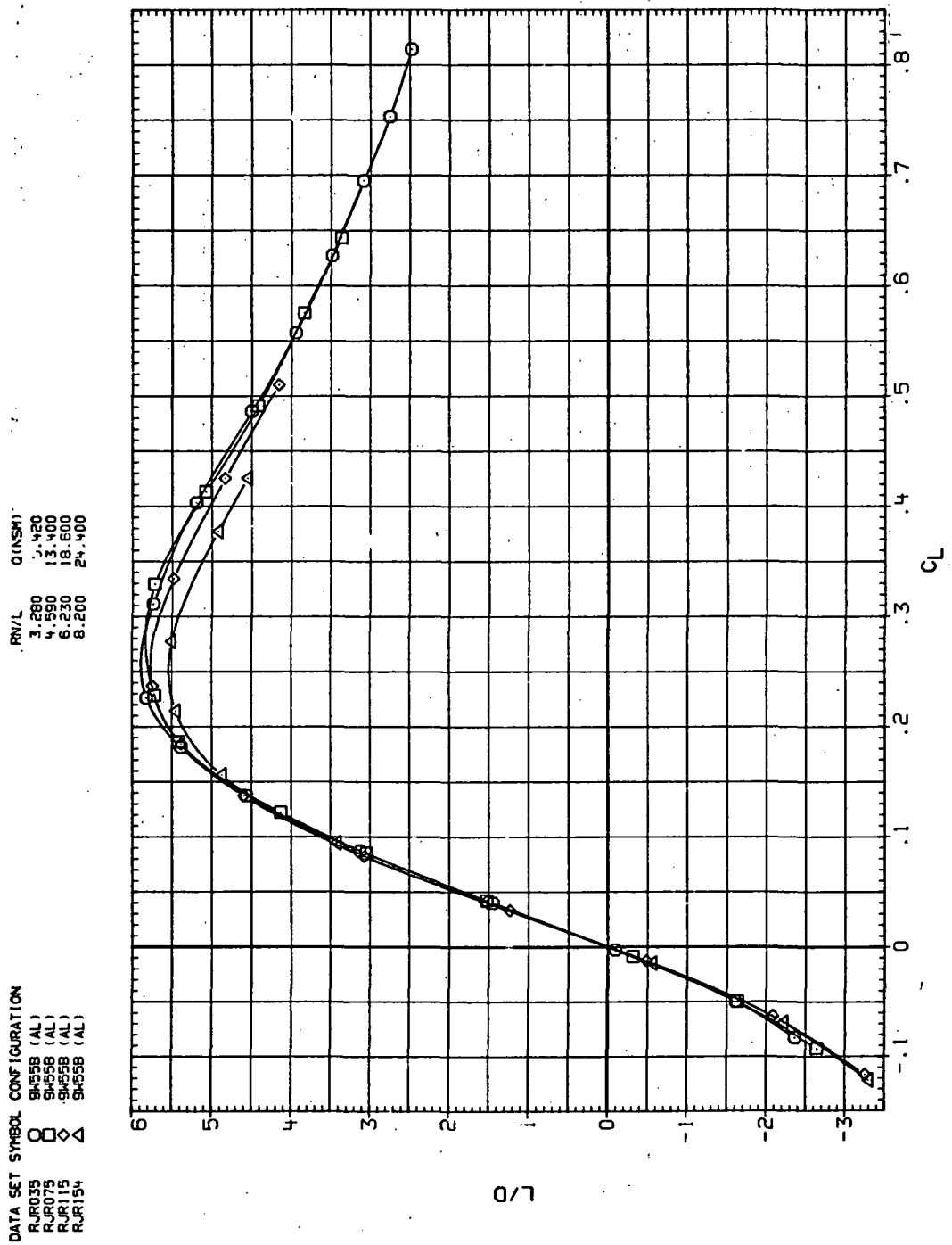
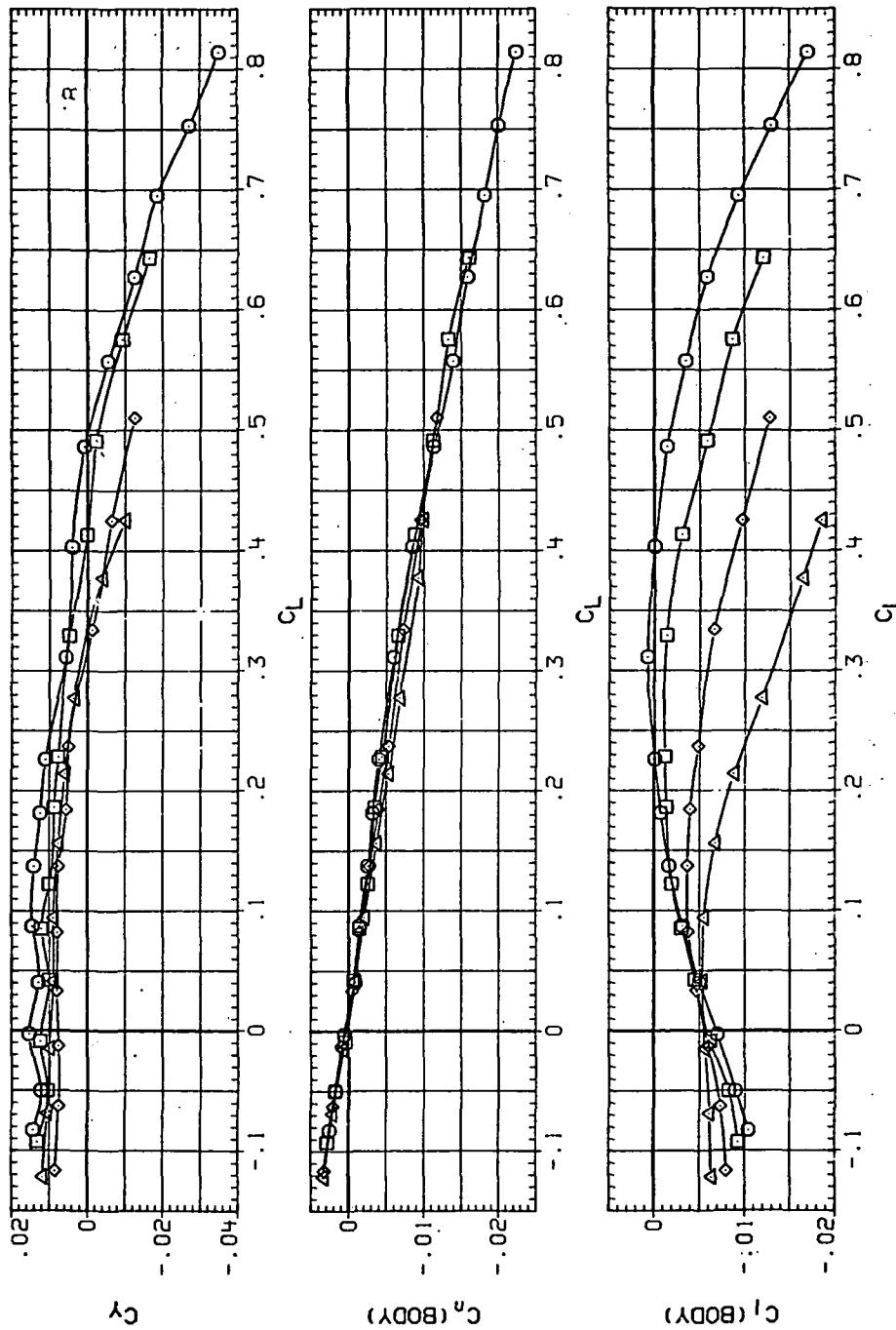
(d) L/D vs C_L .

Figure 33. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR035 ○ 9M558 (AL)
 RJR075 □ 9M558 (AL)
 RJR115 ◇ 9M558 (AL)
 RJR154 △ 9M558 (AL)

RN/L Q (NSH)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

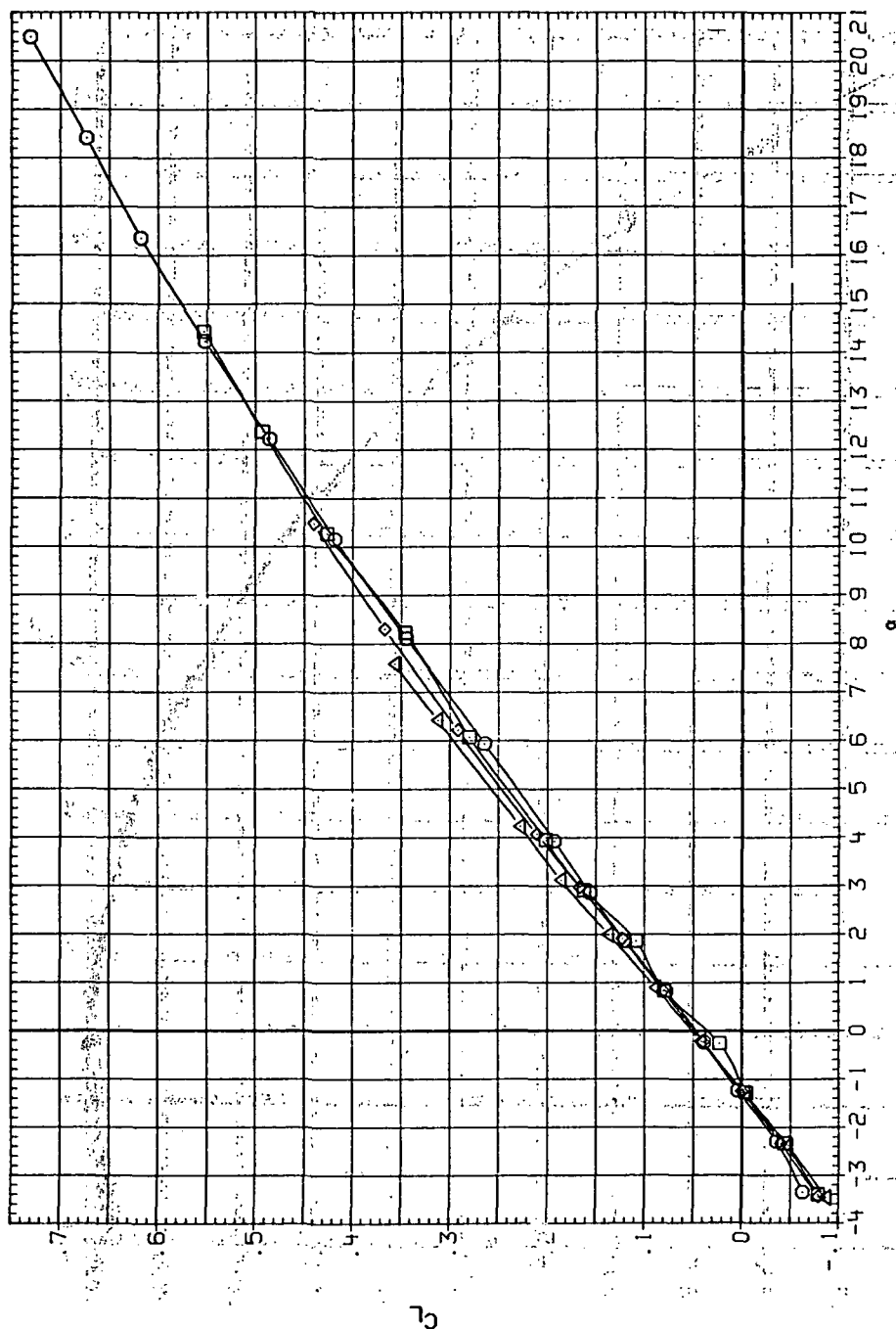


(e) C_y , C_n and C_l vs C_L .

Figure 33. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR036 $\square$ 94558 (AL)
 RJR076 $\square$ 94558 (AL)
 RJR116 $\square$ 94558 (AL)
 RJR155 $\square$ 94558 (AL)

RM/L Q(NSM)
 3.260 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

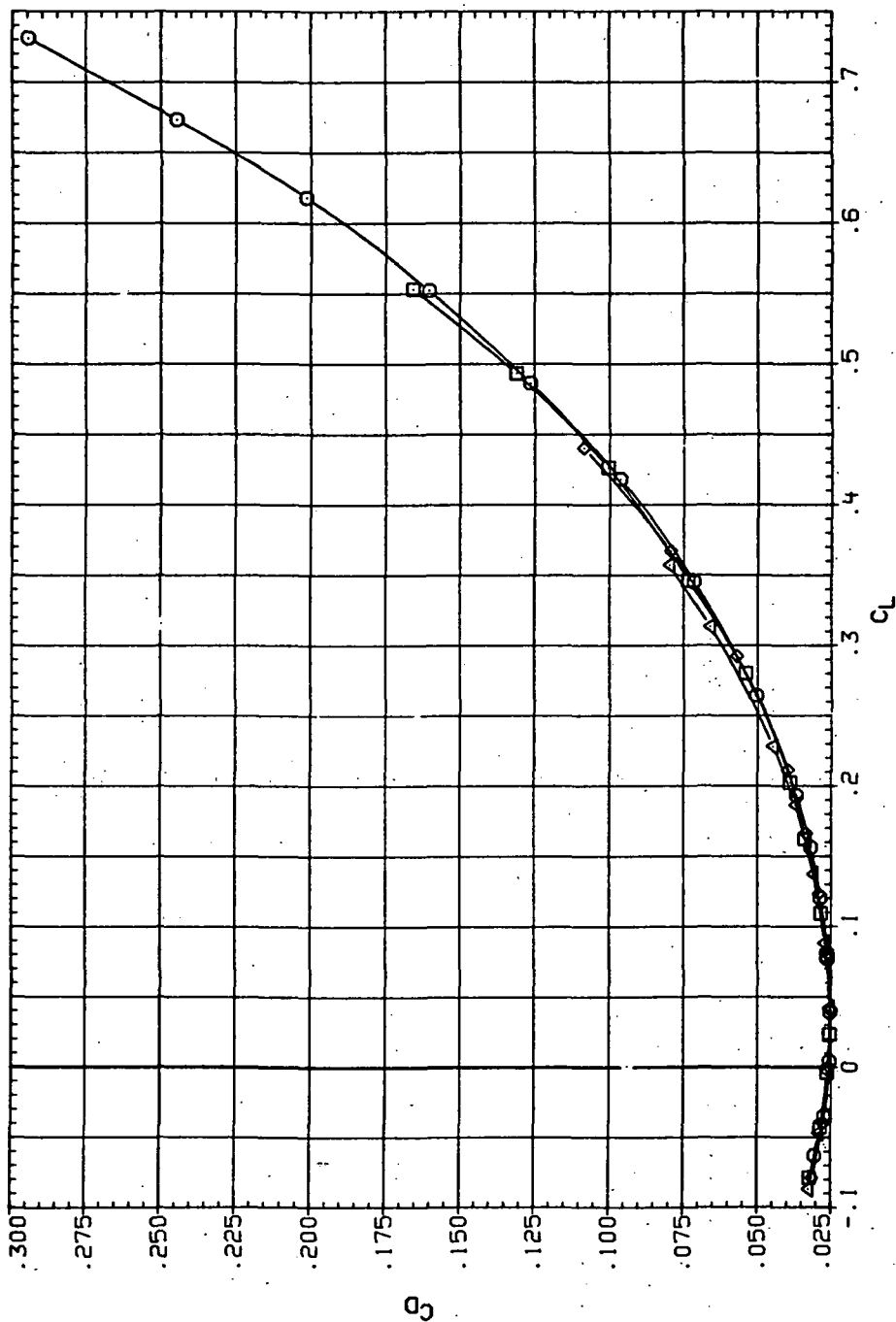


(a) C_L vs α .

Figure 34. Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 2.0$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R4R036 ○ S4S58 (AL)
 R4R076 □ S4S58 (AL)
 R4R116 ◇ S4S58 (AL)
 R4R155 △ S4S58 (AL)

PM/L O(NSM)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

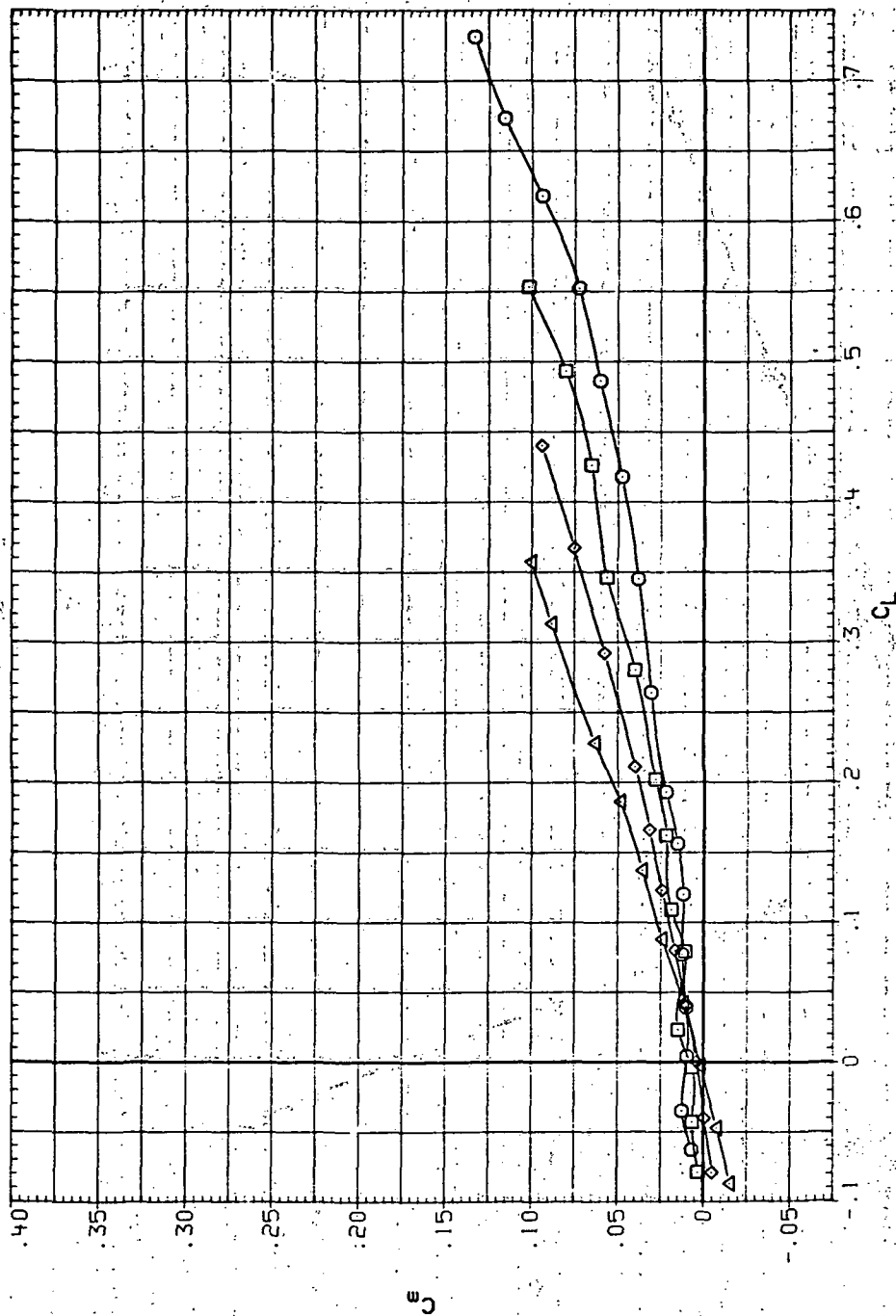


(b) C_D vs C_L .

Figure 34. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUR036 ○ 94558 (AL)
 RUR076 □ 94558 (AL)
 RUR116 ◇ 94558 (AL)
 RUR155 △ 94558 (AL)

RN/L Q(NSM)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

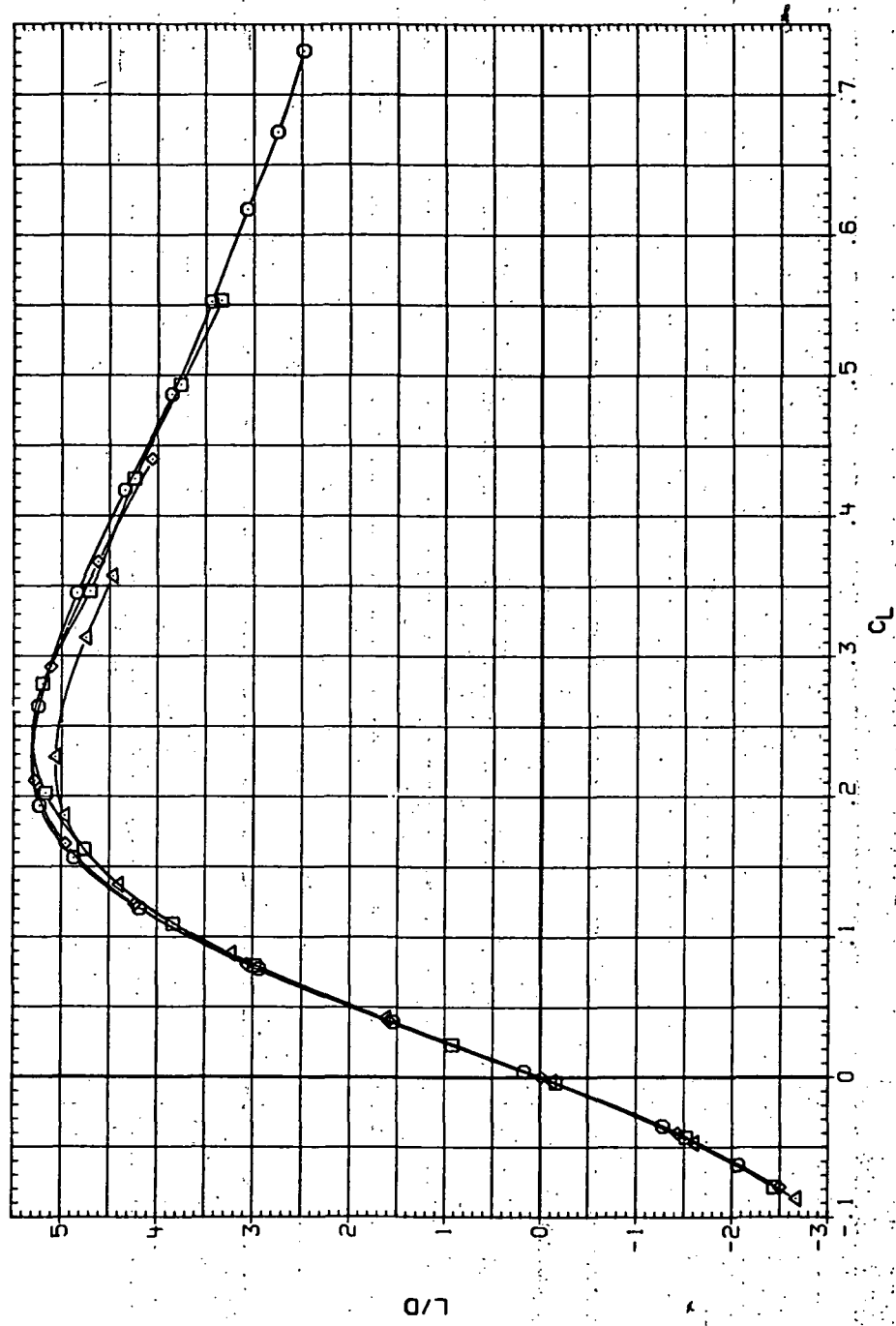


(c) C_m vs C_L

Figure 34.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR038 □ 9455B (AL)
 RJR078 □ 9455B (AL)
 RJR116 □ 9455B (AL)
 RJR155 □ 9455B (AL)

RV/L L(NSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

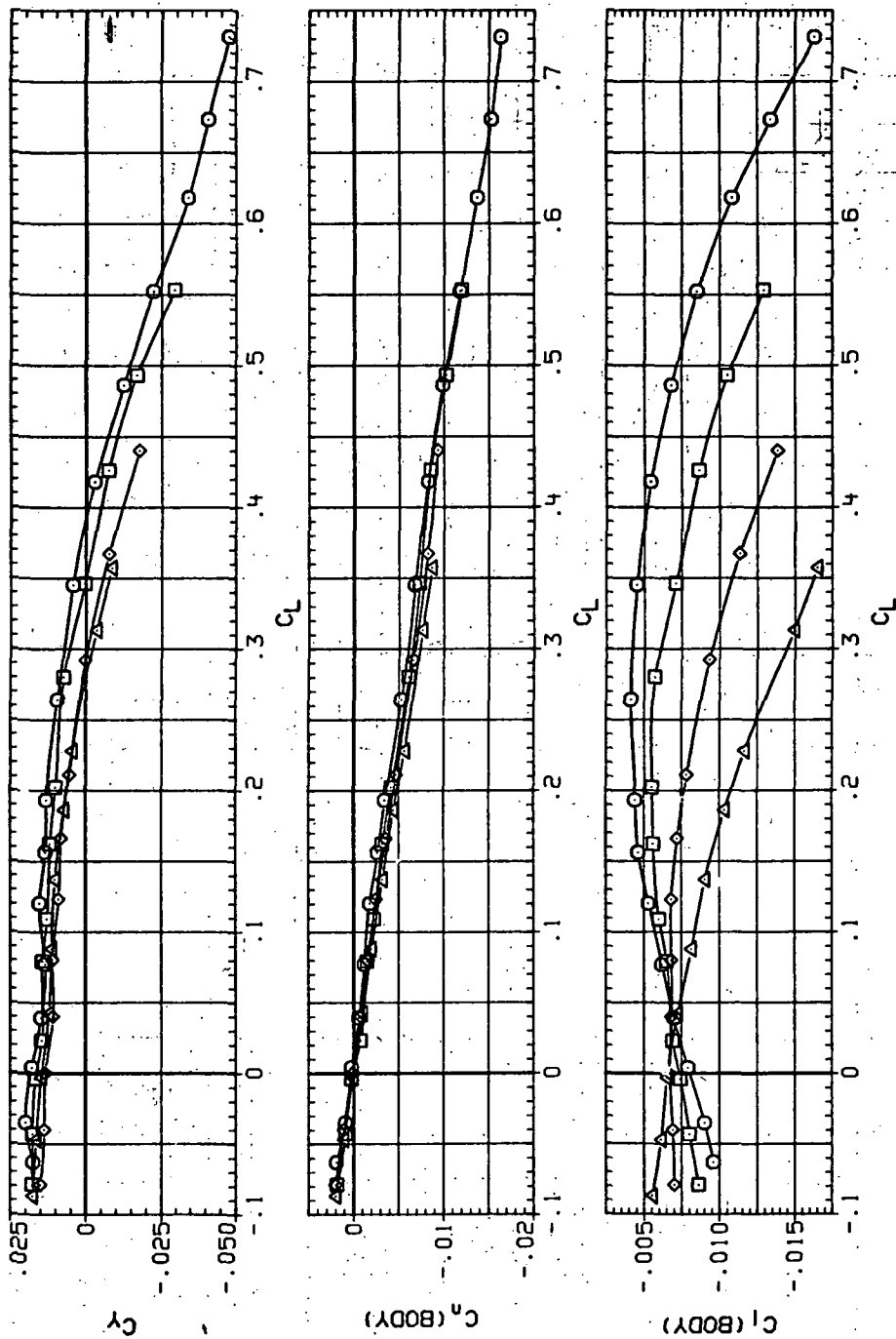


(d) L/D vs C_L

Figure 34.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR036 $\square$ S4558 (AL)
 RJR076 $\square$ S4558 (AL)
 RJR116 $\square$ S4558 (AL)
 RJR156 $\square$ S4558 (AL)

RN/L Q(INSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700



(e) C_Y , C_n and C_l vs C_L .

Figure 34.— Concluded.

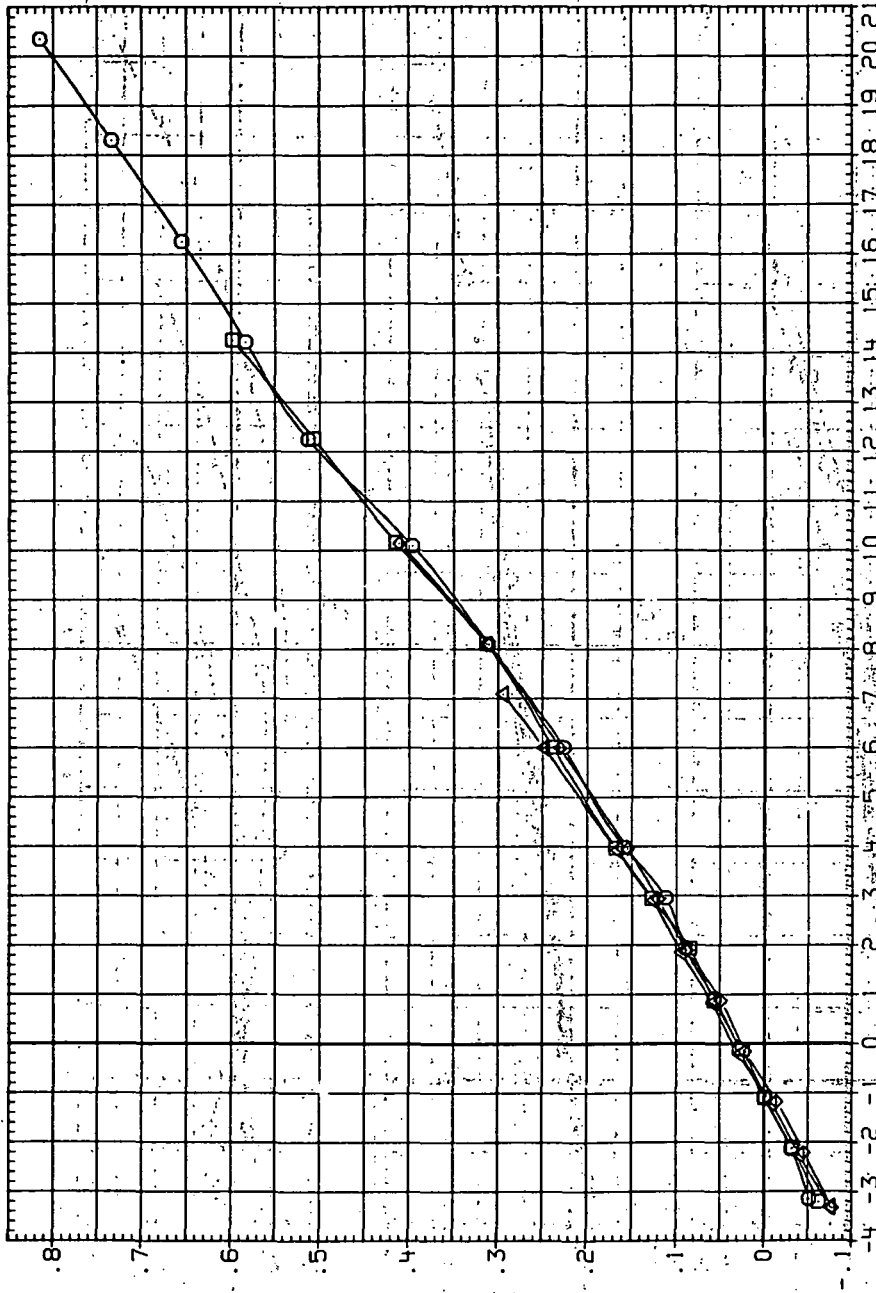
DATA SET SYMBOL CONFIGURATION

RJR038
RJR078
RJR118
RJR157

□
□
△

SH508 (AL)
SH608 (AL)
SH608 (AL)
SH608 (AL)

3.280 3.970
4.590 5.400
6.230 7.180
8.500 9.900

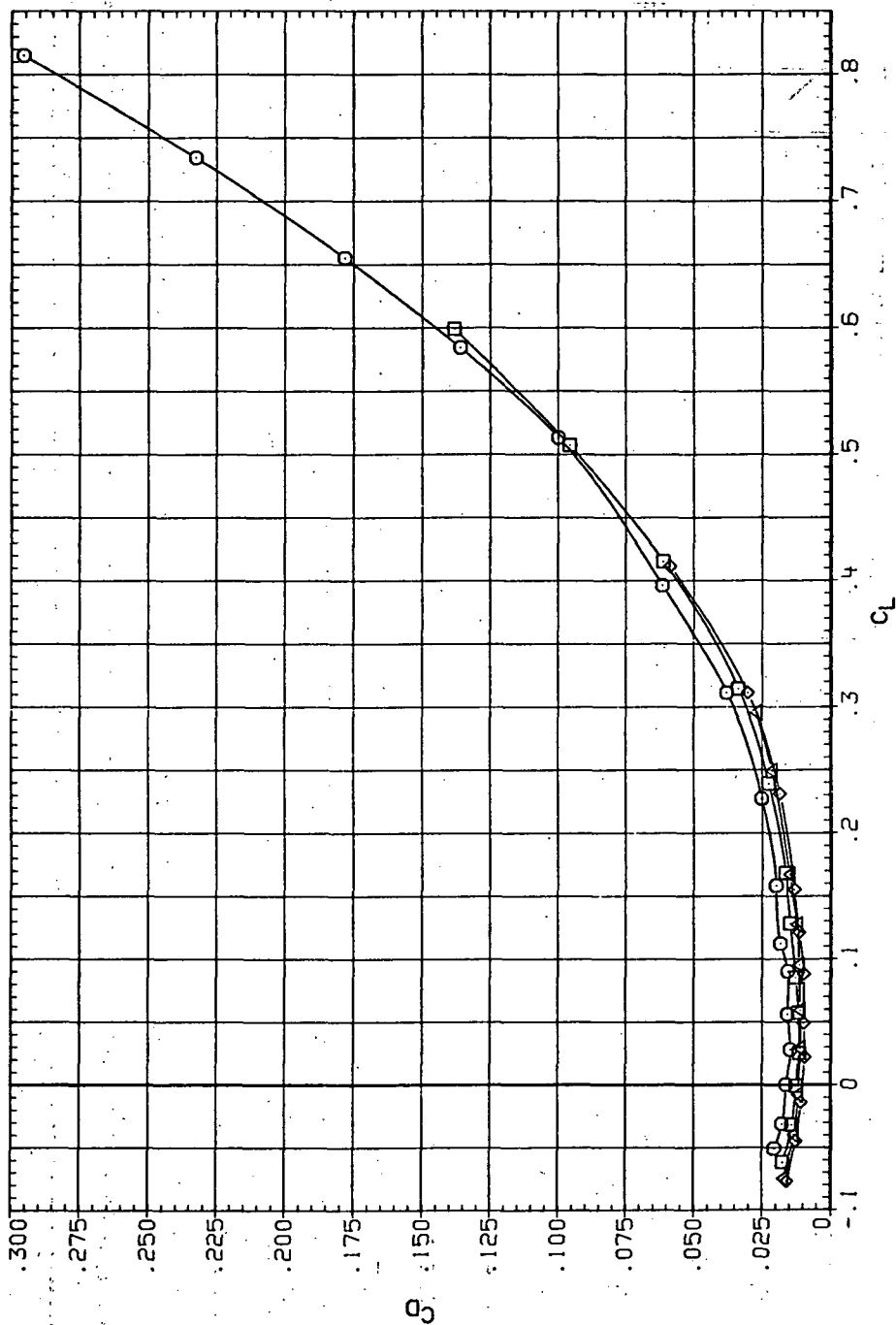


(a) C_L vs. α .

Figure 35. Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.4$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUP038 ○
 RUP078 □
 RUP118 △
 RUP157 ▲

RN/L Q (NSM)
 3.280 3.870
 4.590 5.100
 6.230 7.180
 8.200 9.900

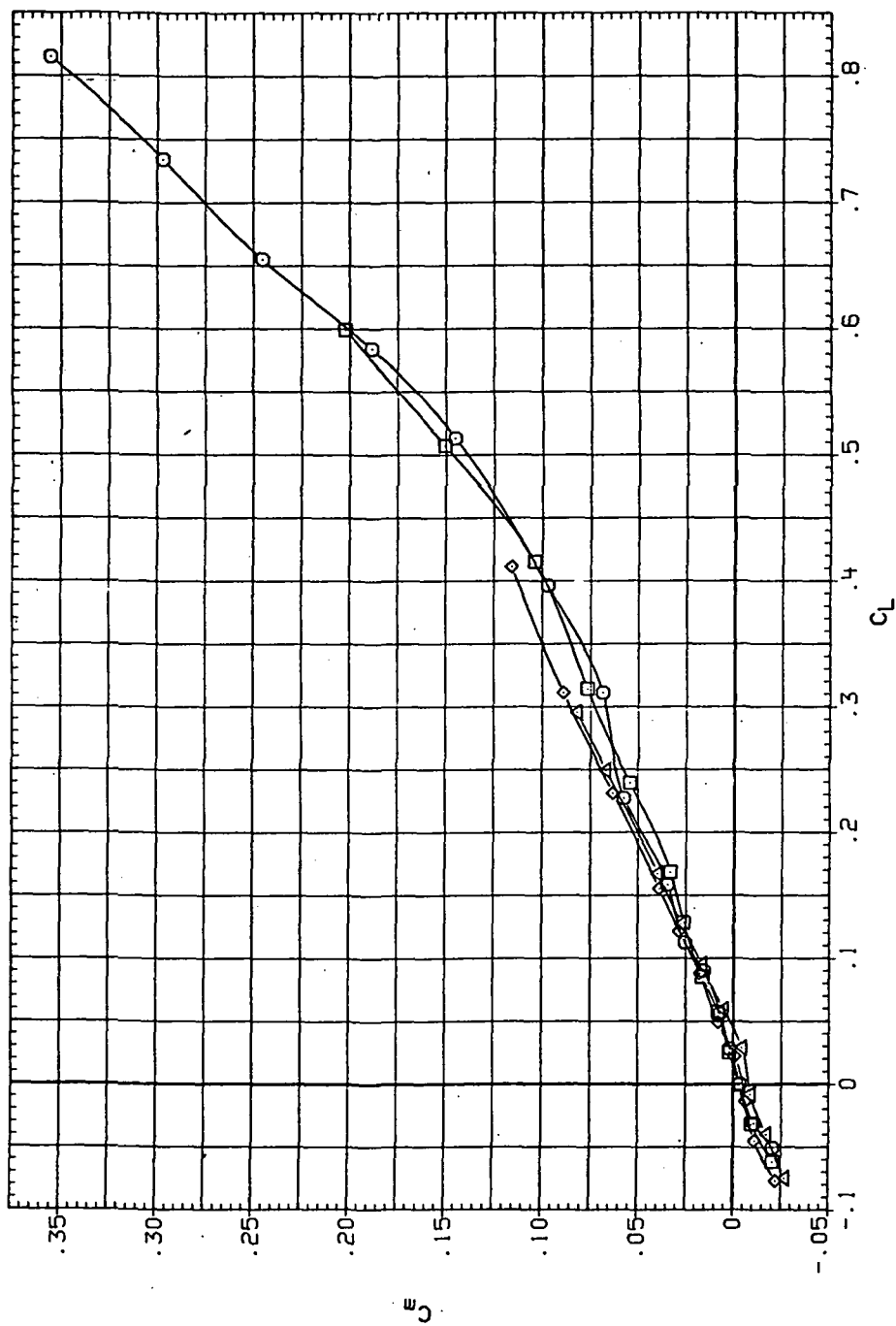


(b) C_D vs C_L

Figure 35.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR038 ○ 9460B (AL)
 RJR078 □ 9460B (AL)
 RJR118 ◇ 9460B (AL)
 RJR157 △ 9460B (AL)

RV/L Q (NSK)
 3.280 3.870
 4.590 5.460
 6.230 7.480
 8.200 9.900

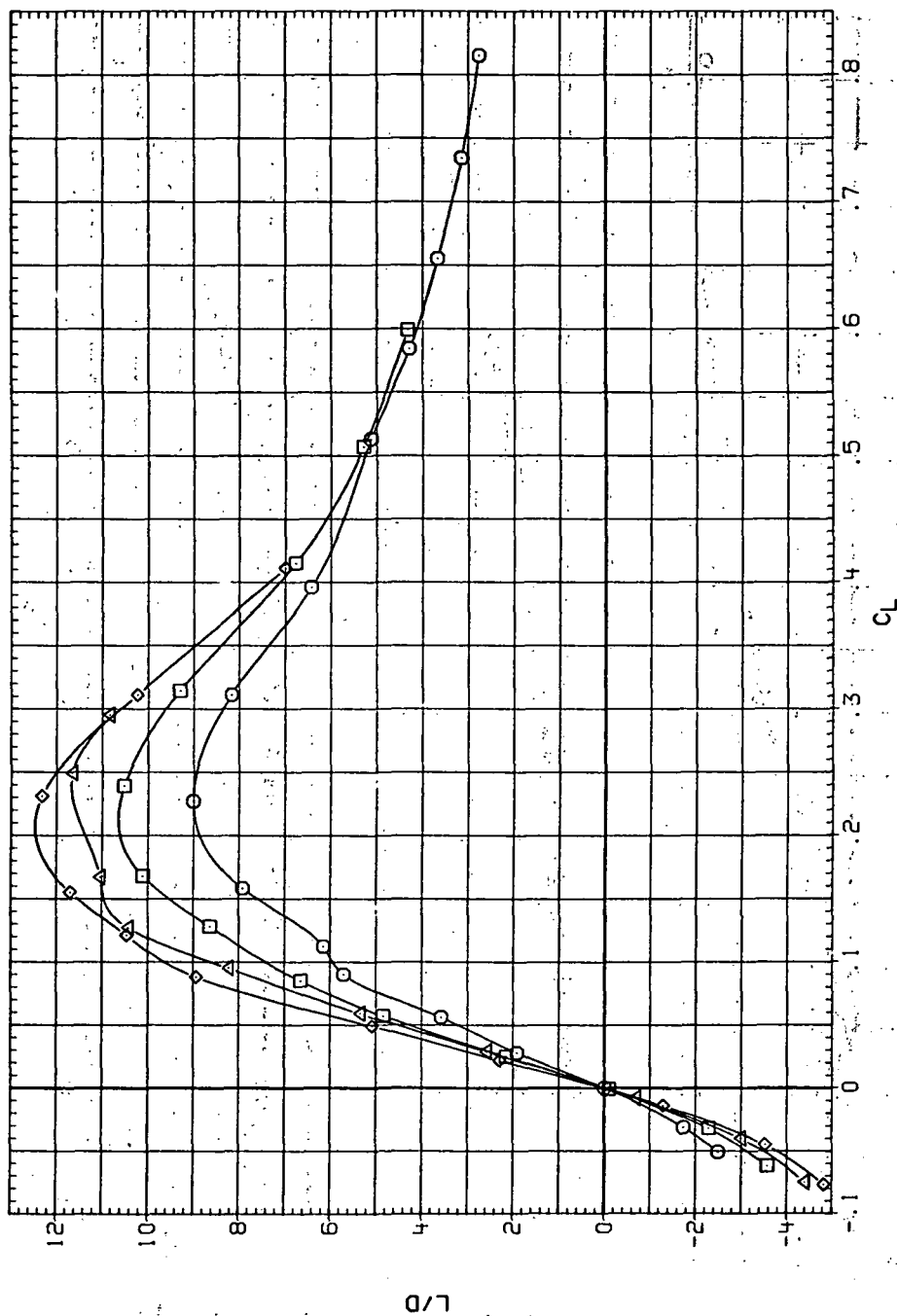


(c) C_m vs C_L .

Figure 35.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR038 ◻ ◻ ◻
 RJR078 ◻ ◻ ◻
 RJR118 ◻ ◻ ◻
 RJR157 ◻ ◻ ◻

RN/L₀ Q(NSH)
 3.260 3.870
 5.500 5.100
 6.230 7.180
 8.200 9.900

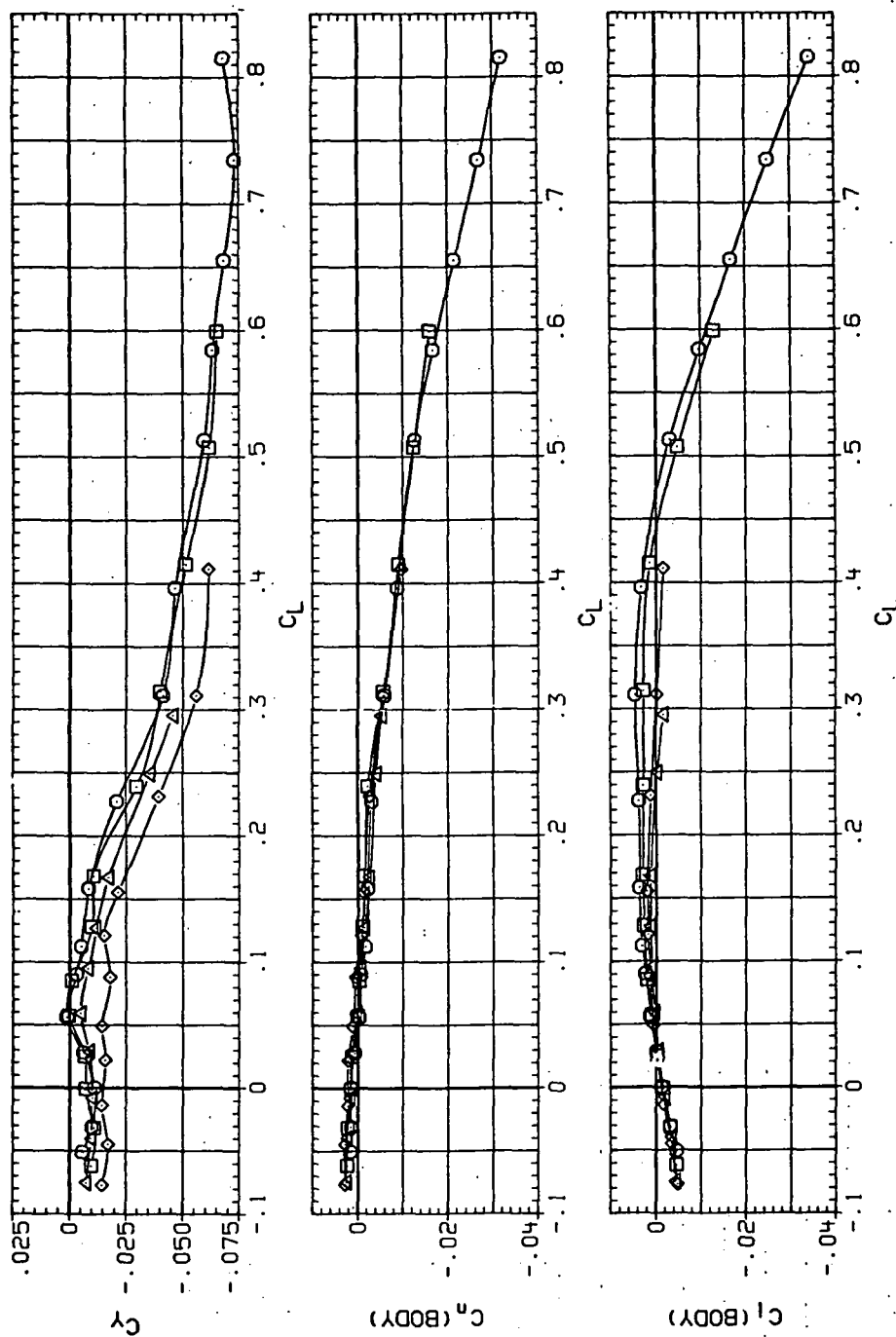


(d) L/D vs C_L .

Figure 35. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR038 $\square$ SH508 (AL)
 RJR078 $\square$ SH508 (AL)
 RJR118 $\square$ SH508 (AL)
 RJR157 $\triangle$ SH508 (AL)

RV/L Q(NSM)
 3.260 3.870
 4.560 5.400
 6.230 7.480
 8.200 9.900

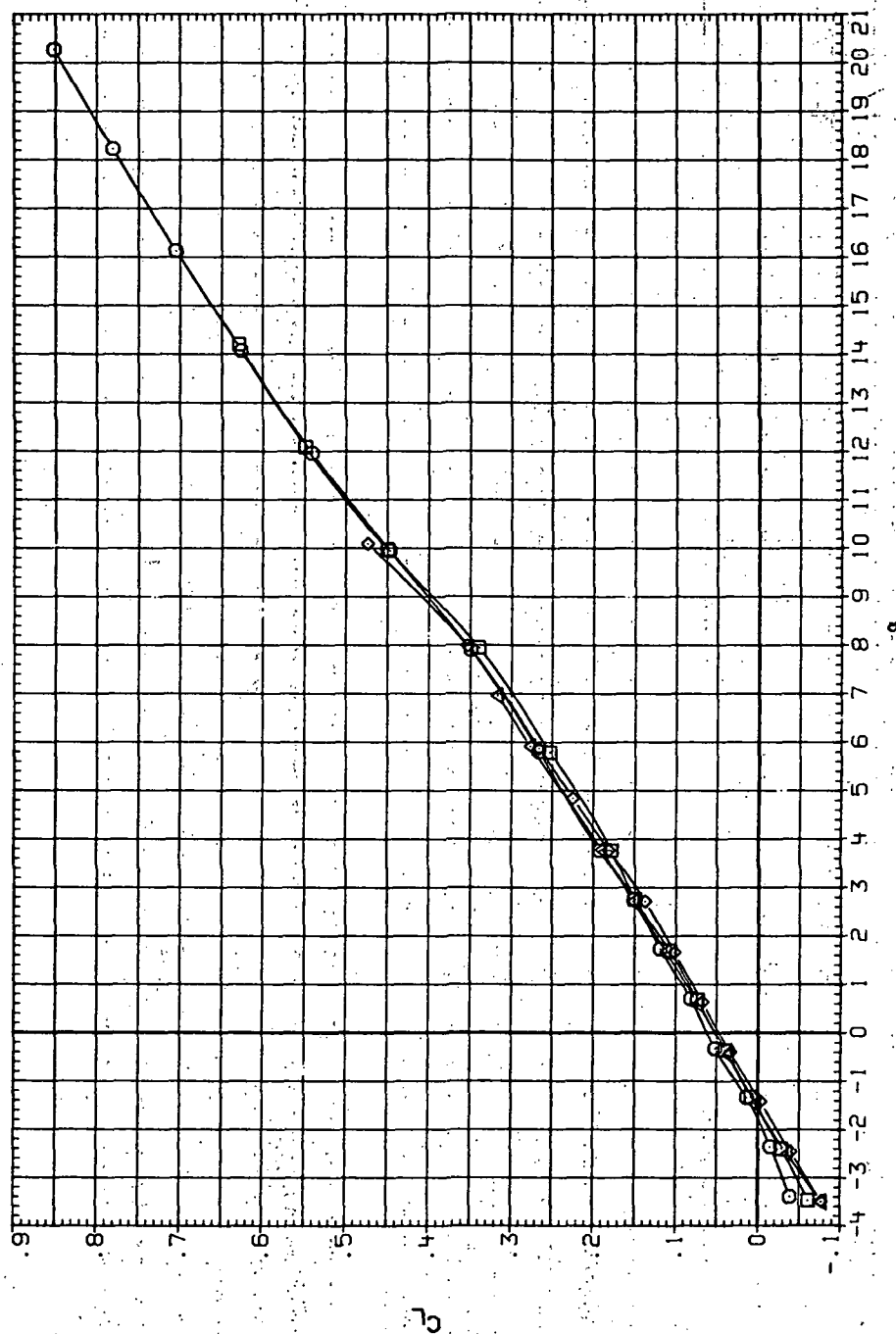


(e) C_Y , C_n and C_l vs C_L .

Figure 35.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR039 $\square$ 94608 (AL)
 RJR079 $\square$ 94608 (AL)
 RJR119 $\square$ 94608 (AL)
 RJR158 $\square$ 94608 (AL)

RN/L Q(NSH)
 3.260 5.610
 4.580 7.710
 6.230 10.600
 8.200 14.100

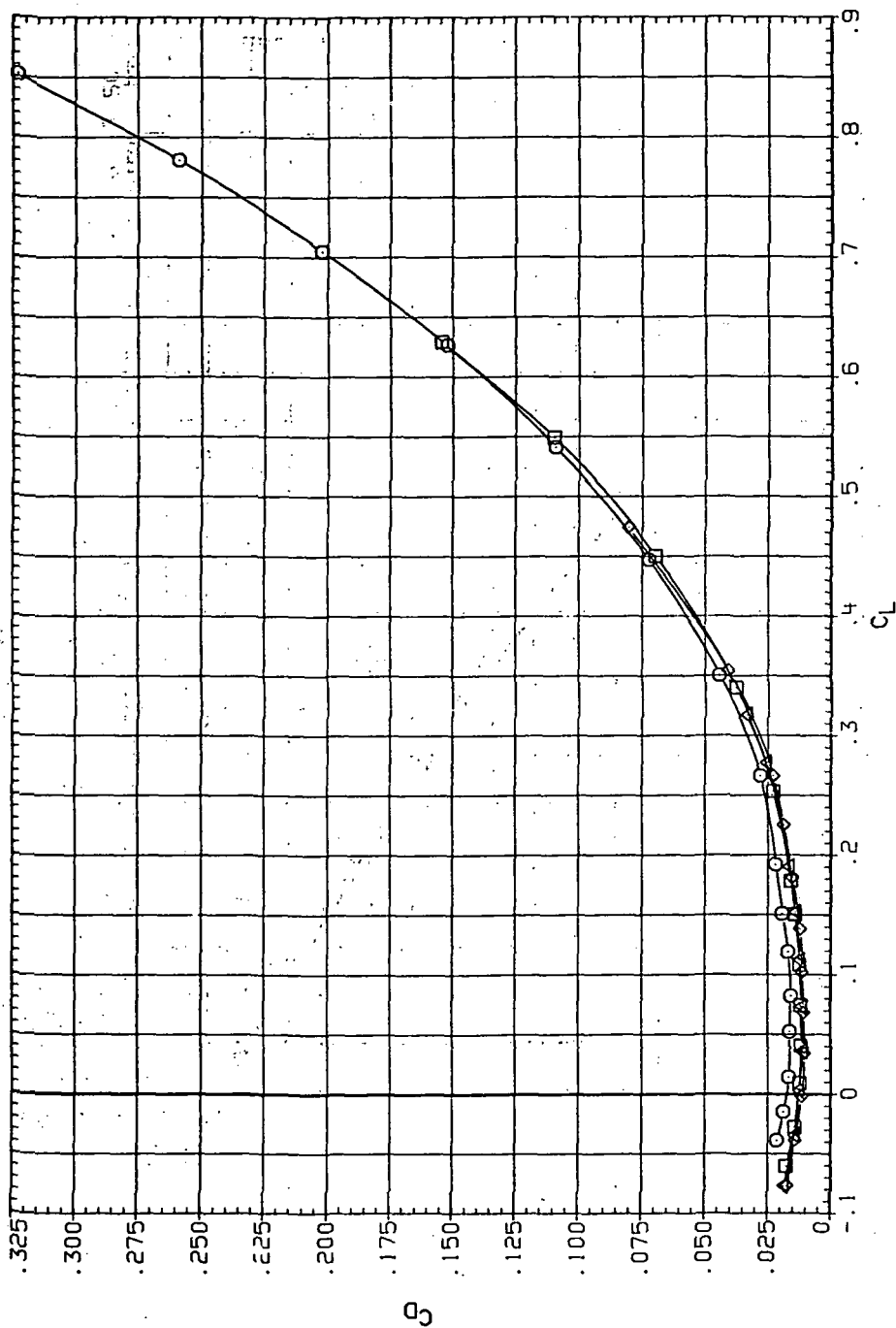


(a) C_L vs α .

Figure 36.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR035 ○ 9460B (AL)
 RJR079 □ 9460B (AL)
 RJR119 ◇ 9460B (AL)
 RJR158 △ 9460B (AL)

RV/L 0.15M
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

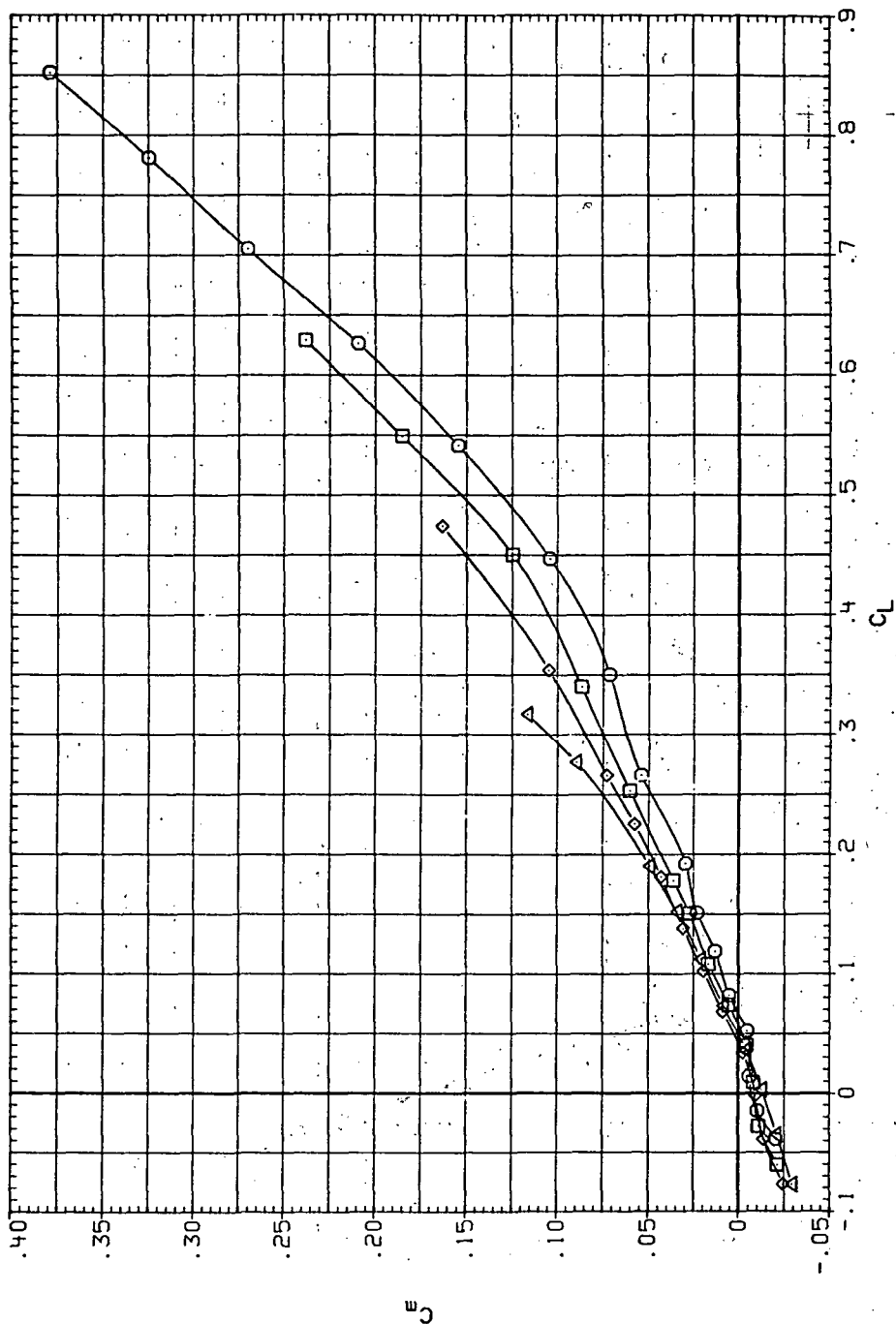


(b) $\bar{C}_D$ vs C_L .

Figure 36. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR039 ○ 94608 (AL)
 RJR079 □ 94608 (AL)
 RJR119 △ 94608 (AL)
 RJR158 ◇ 94608 (AL)

RN/L Q(NC-1)
 3.280 5.510
 4.550 7.710
 6.230 10.600
 8.200 14.100

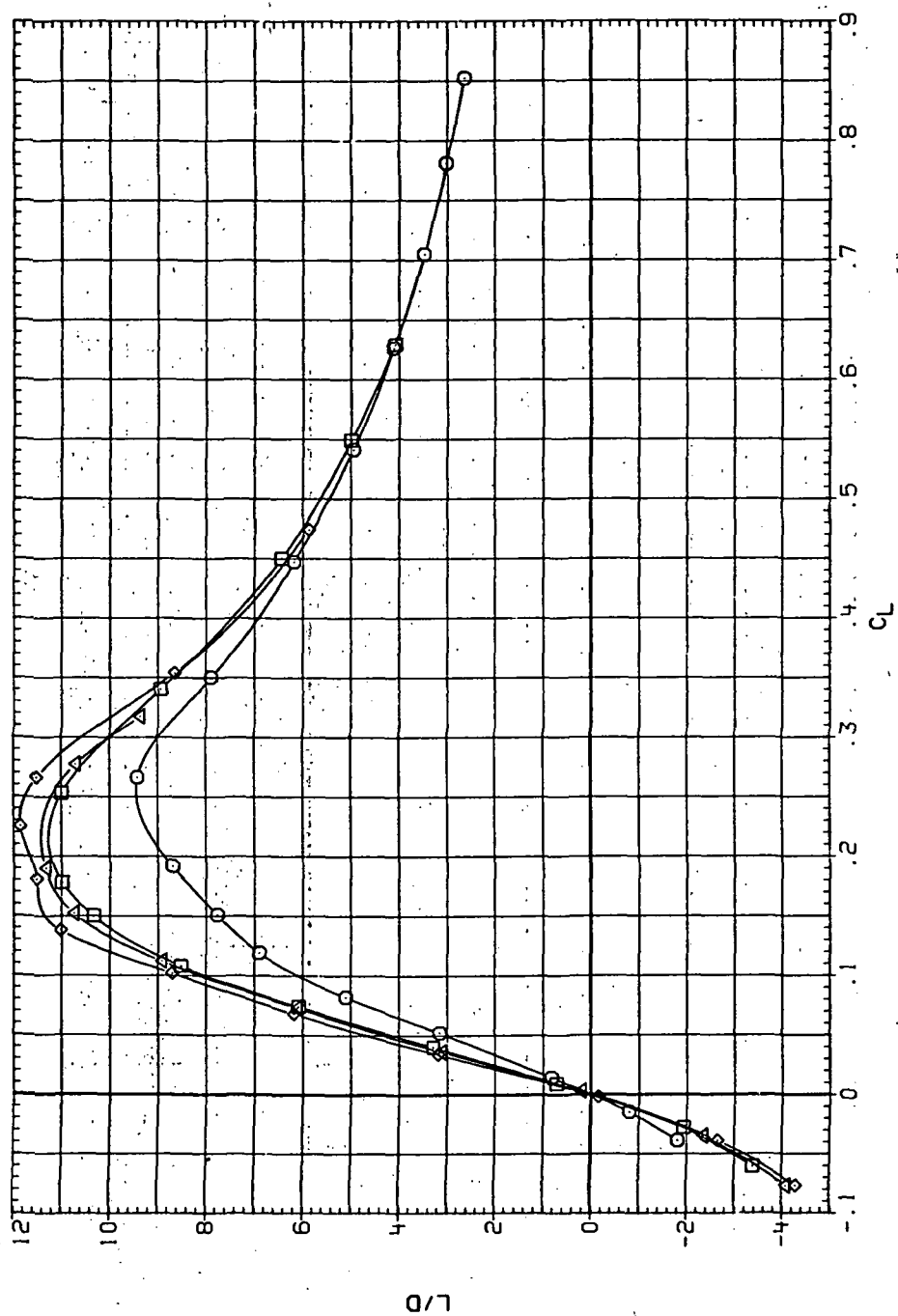


(c) C_m vs C_L .

Figure 36.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR039 9H50B (AL) $\square$
 RJR079 9H50B (AL) $\diamond$
 RJR119 9H50B (AL) $\triangle$
 RJR158 9H50B (AL) $\square$

RV/L ∞ Q (NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100



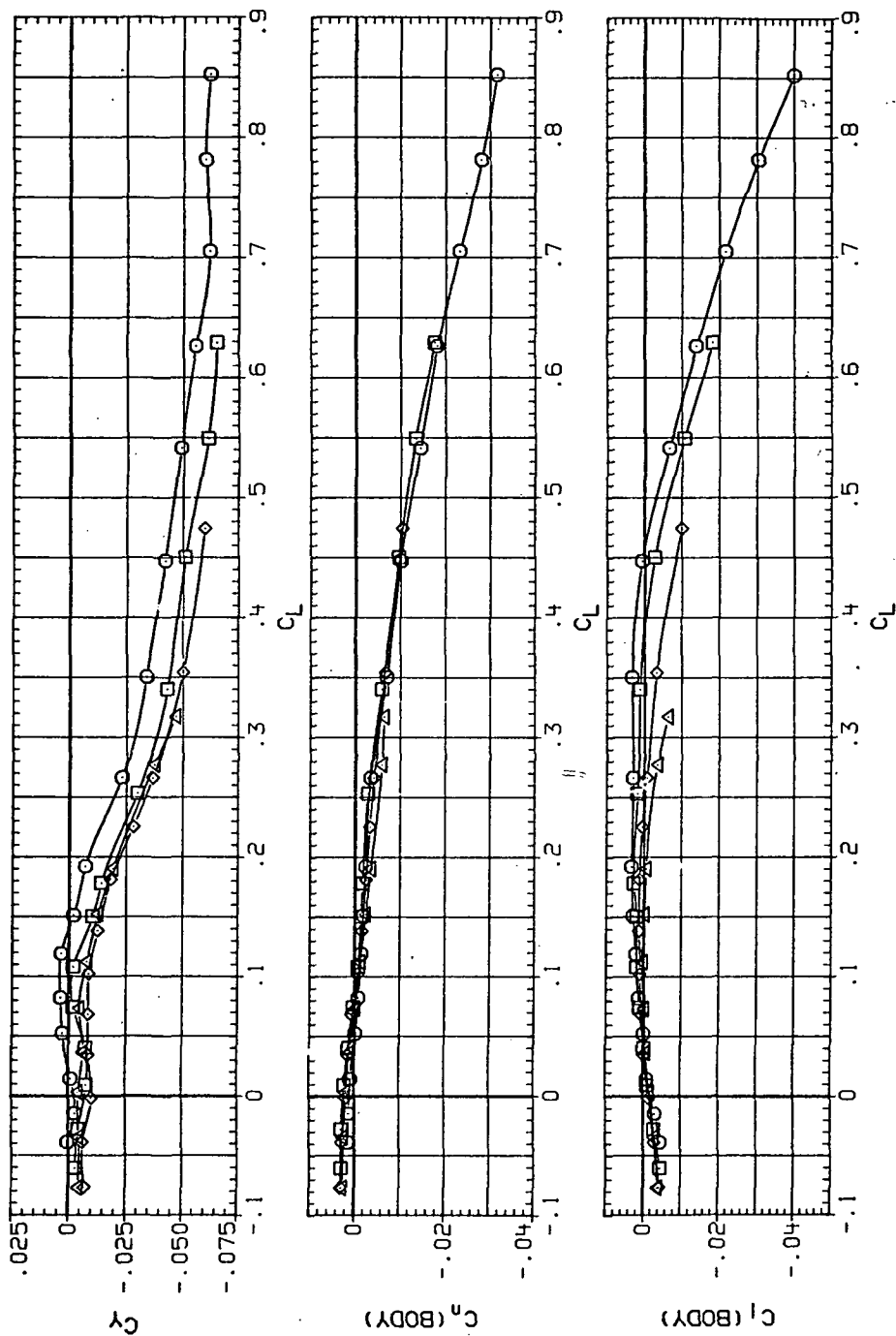
(d) L/D vs C_L .

Figure 36.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR039 9M608 (AL)
 RJR079 9M608 (AL)
 RJR119 9M608 (AL)
 RJR158 9M608 (AL)

RN/L Q(NSH)
 3.280 5.610
 4.590 7.710
 6.230 10.600
 8.200 14.100

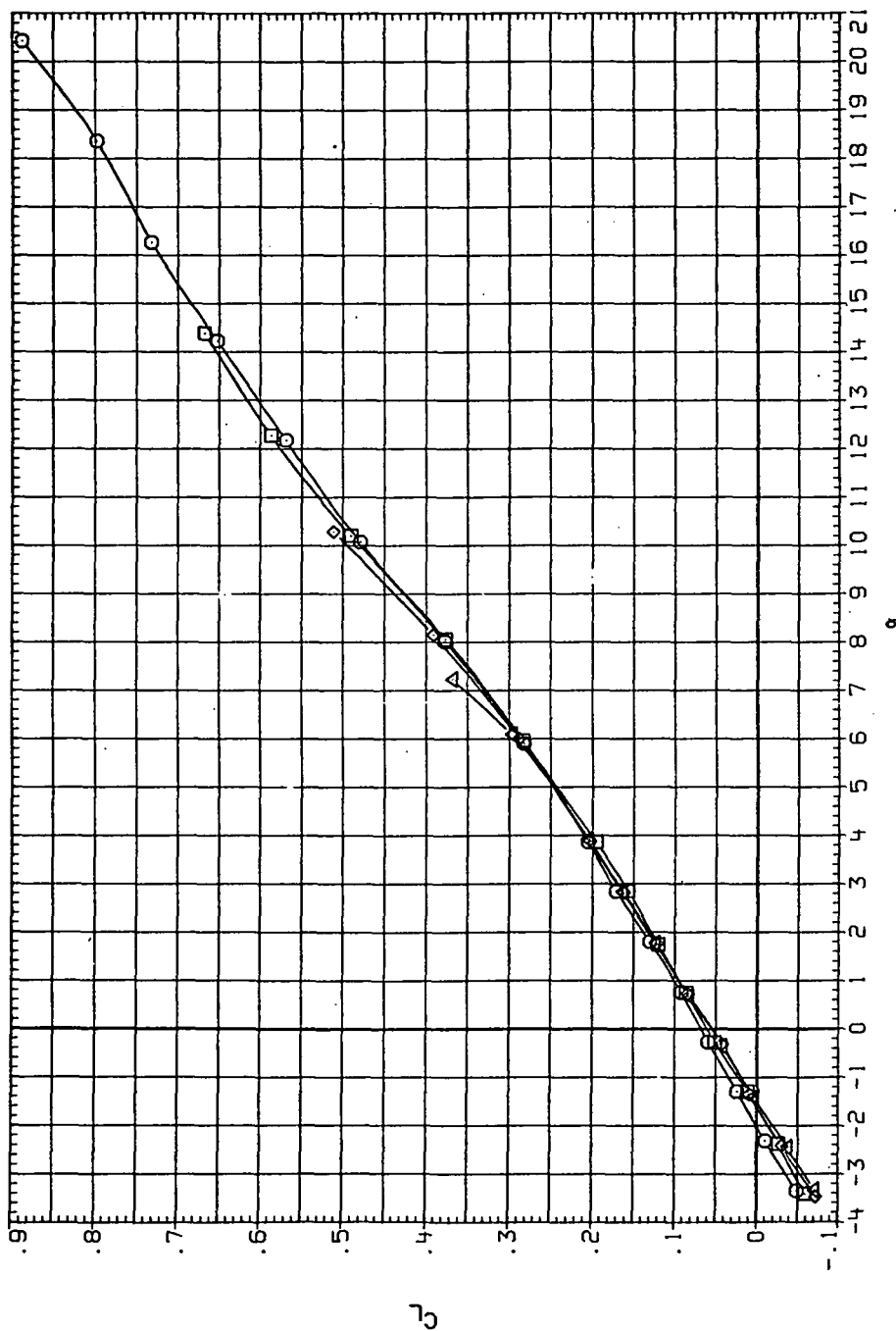


(e) C_γ , C_n and C_l vs C_L .

Figure 36.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR040 ◻ 94608 (AL)
 RJR080 ◻ 94608 (AL)
 RJR120 ◻ 94608 (AL)
 RJR159 ◻ 94608 (AL)

RN/L Q(NSH)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

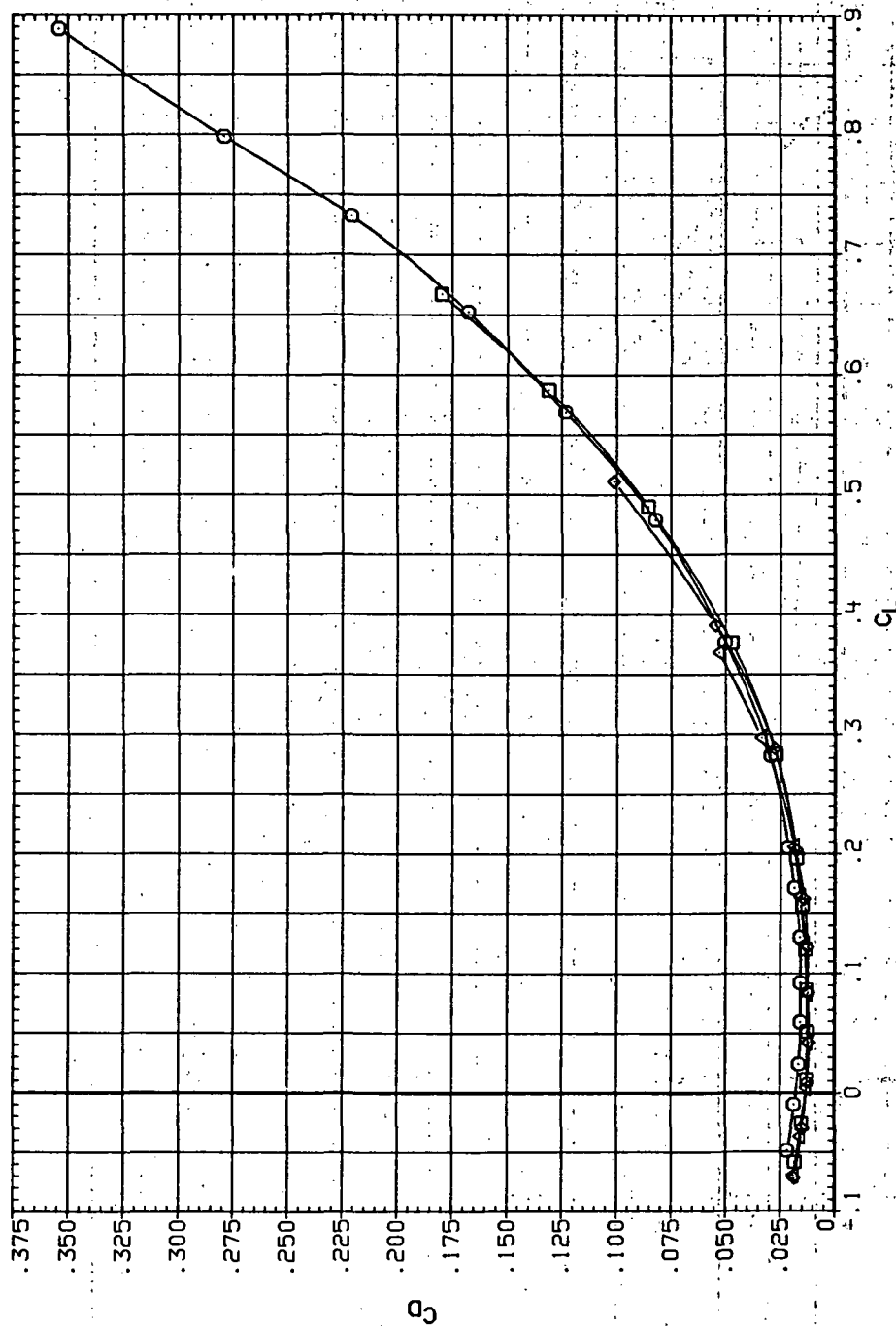


(a) C_L vs α .

Figure 37.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.8$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR040 ○ 94608 (AL)
 RJR080 □ 94608 (AL)
 RJR120 ◇ 94608 (AL)
 RJR159 △ 94608 (AL)

RN/L Q (NSM)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

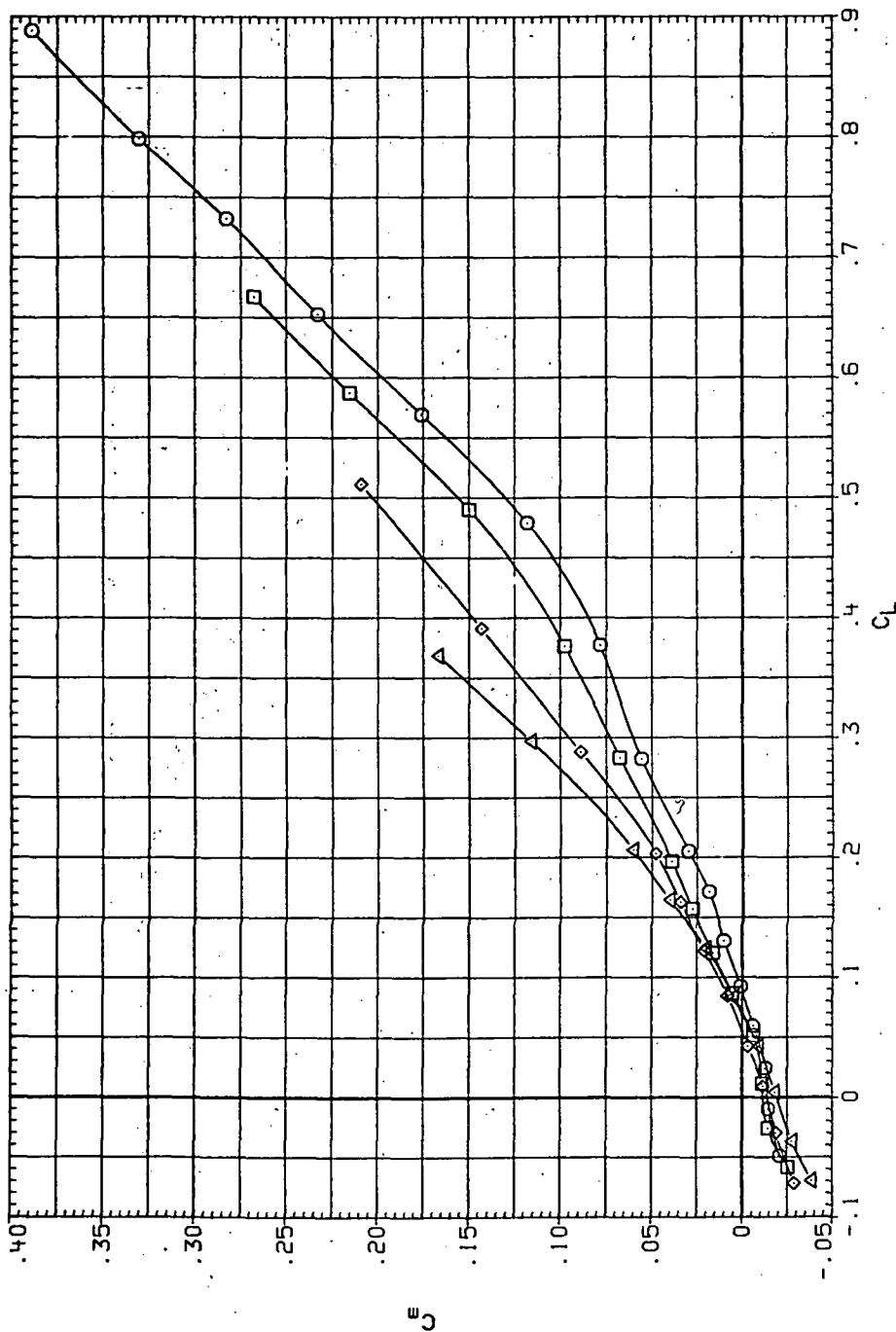


(b) C_D vs C_L

Figure 37. — Continued.

DATA SET SYMBOL CONFIGURATION
 R0040 O SHS08 (AL)
 R0080 O SHS08 (AL)
 R0120 O SHS08 (AL)
 R0159 O SHS08 (AL)

RN/L Q(NSP)
 3.280 7.050
 4.590 9.720
 6.230 13.400
 8.200 17.800



(c) C_m vs C_L .

Figure 37.— Continued.

DATA SET SYMBOL CONFIGURATION

○ 9M608 (AL)
 □ 9M608 (AL)
 ◇ 9M608 (AL)
 △ 9M608 (AL)

RV/L Q (NSH)
 3.280 7.060
 4.590 9.720
 6.230 13.400
 8.200 17.800

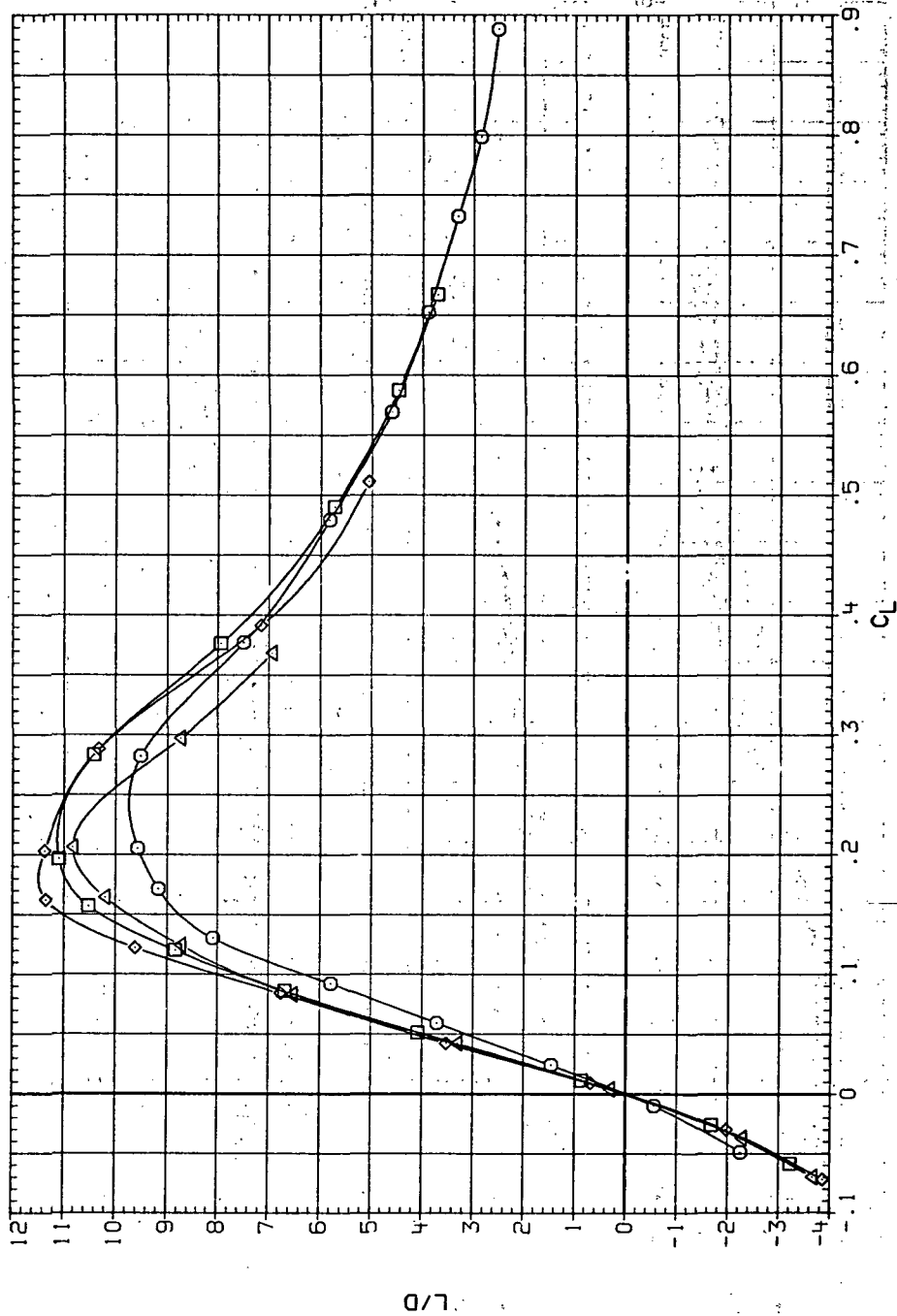
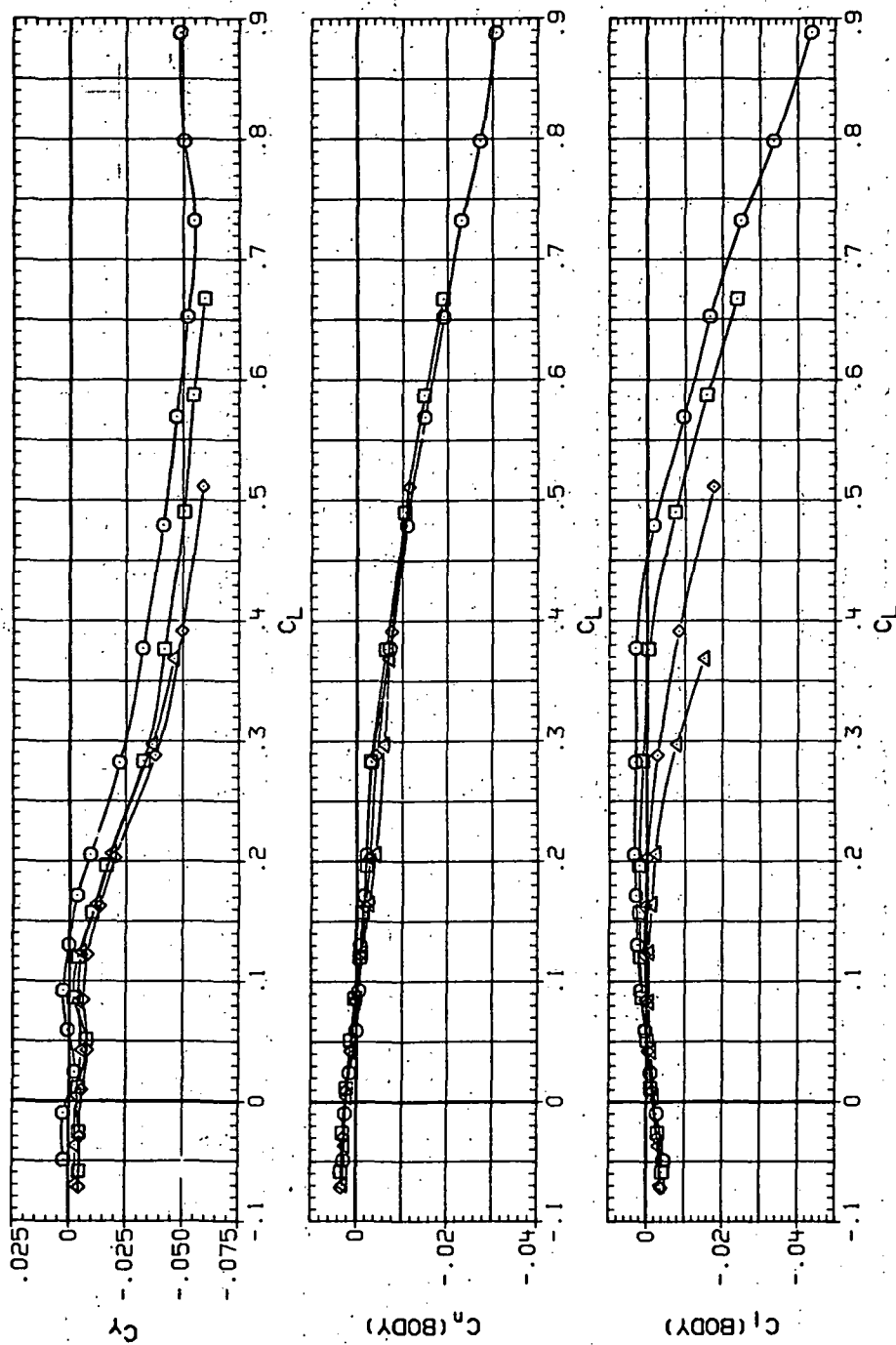
(d) L/D vs C_L .

Figure 37.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR040 ○ SH508 (AL)
 RJR080 □ SH508 (AL)
 RJR120 △ SH508 (AL)
 RJR159 ◇ SH508 (AL)

RN/L Q(NSH)
 3.280 7.550
 4.590 9.720
 6.230 13.400
 8.200 17.800

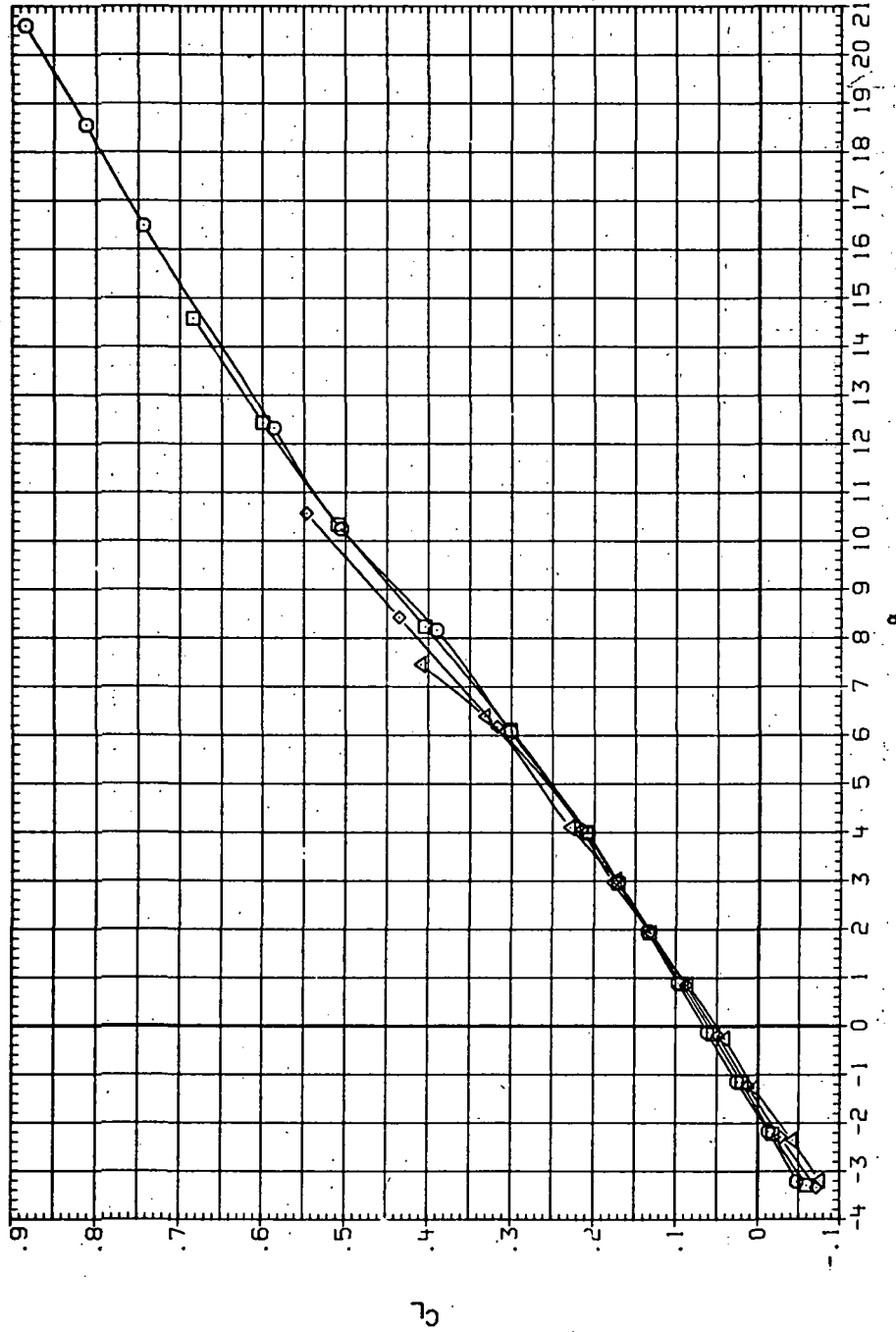


(e) C_Y , C_n and C_l vs C_L .

Figure 37.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR041 ○ 94608 (AL)
 RJR081 □ 94608 (AL)
 RJR121 ◇ 94608 (AL)
 RJR160 △ 94608 (AL)

FN/L Q (NEM)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

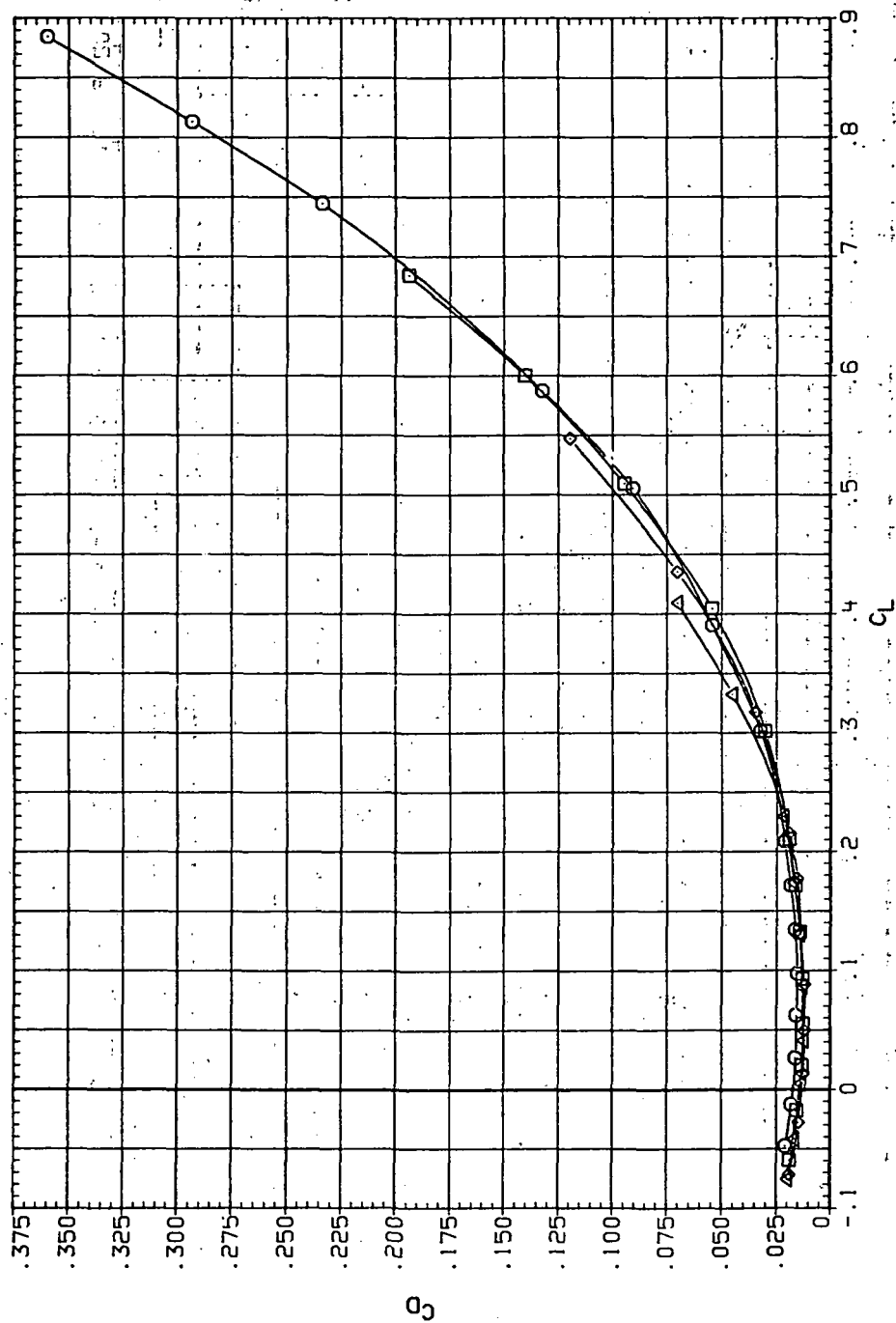


(a) C_L vs α .

Figure 38.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.9$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR041
 RJR081
 RJR121
 RJR160

RN/L Q (NSM)
 3.280 7.450
 4.590 10.500
 5.230 11.500
 8.200 19.200

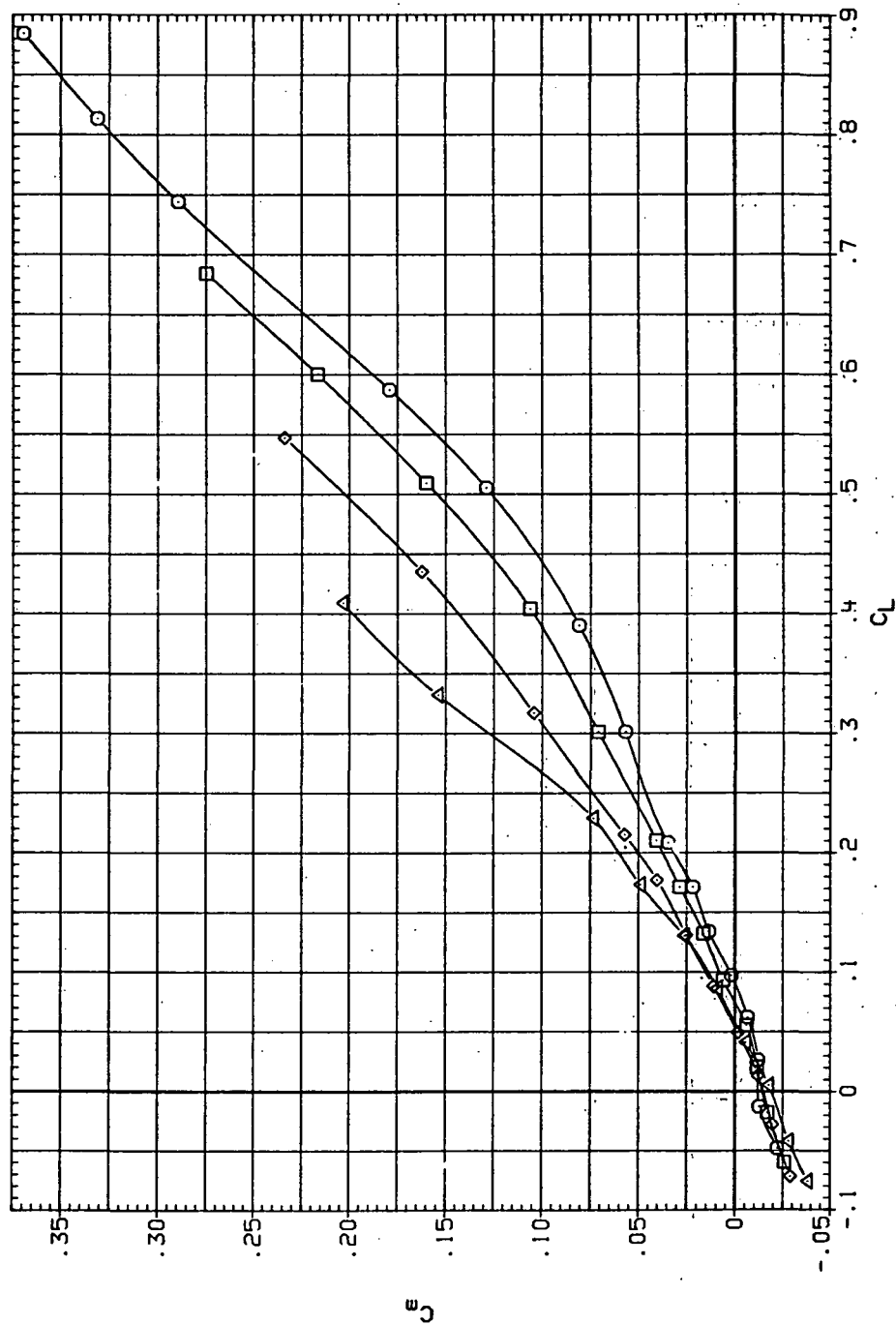


(b) C_D vs C_L

Figure 38. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR041 ○ 94508 (AL)
 RJR081 □ 94508 (AL)
 RJR121 ◇ 94508 (AL)
 RJR150 △ 94508 (AL)

RN/L Q(NSM)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200

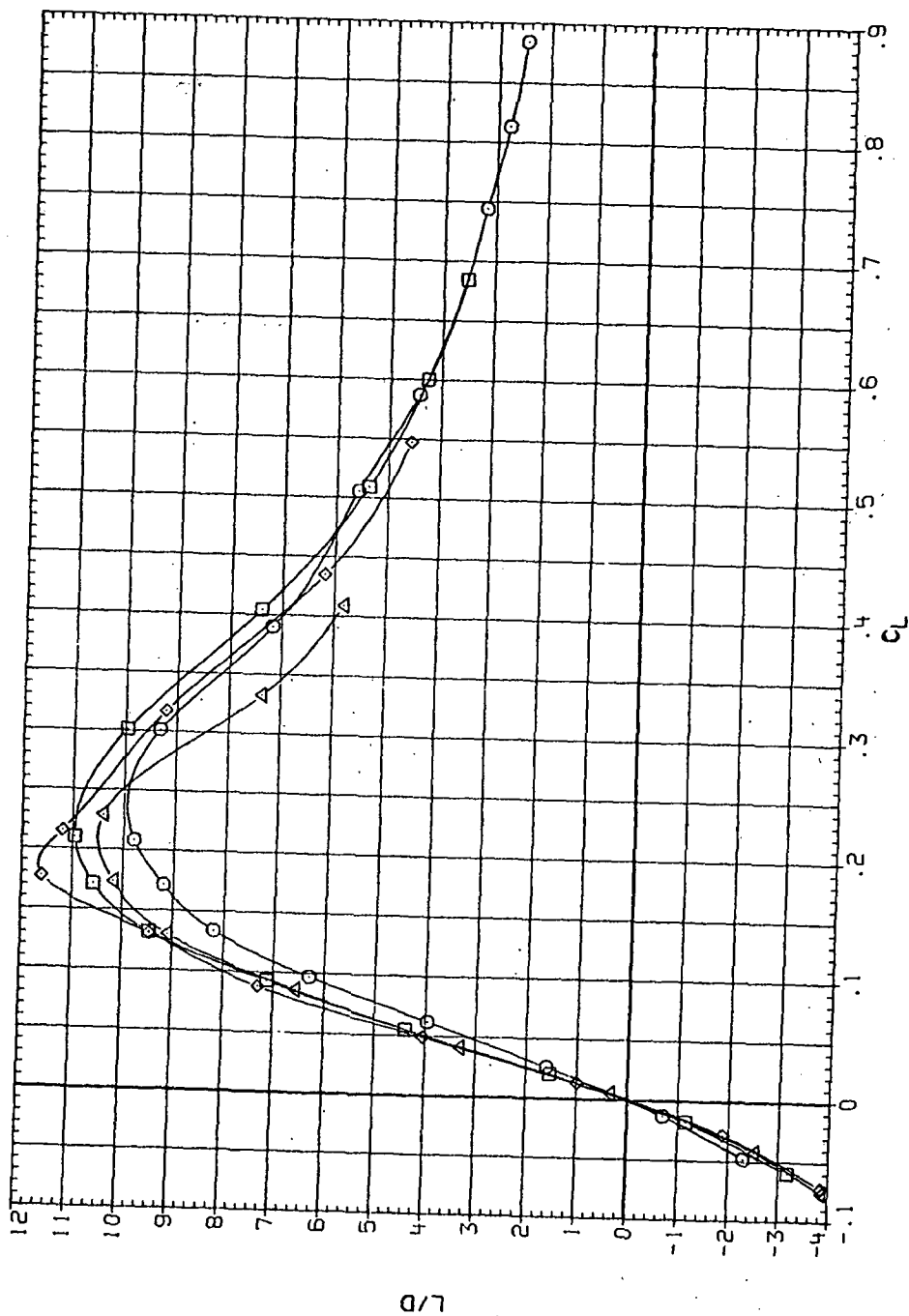


(c) C_m vs C_L .

Figure 38.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR041 9450B (AL)
 RJR081 9450B (AL)
 RJR121 9450B (AL)
 RJR180 9450B (AL)

RN/L Q(NSH)
 3.280 7.440
 4.590 10.500
 6.230 14.500
 8.200 19.200



(d) L/D vs C_L .

Figure 38.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR041
RJR081
RJR121
RJR160

○
□
△

SH60B (AL)
SH60B (AL)
SH60B (AL)
SH60B (AL)

RN/L Q (INSH)
3.280 7.440
4.590 10.500
6.230 14.500
8.200 19.200

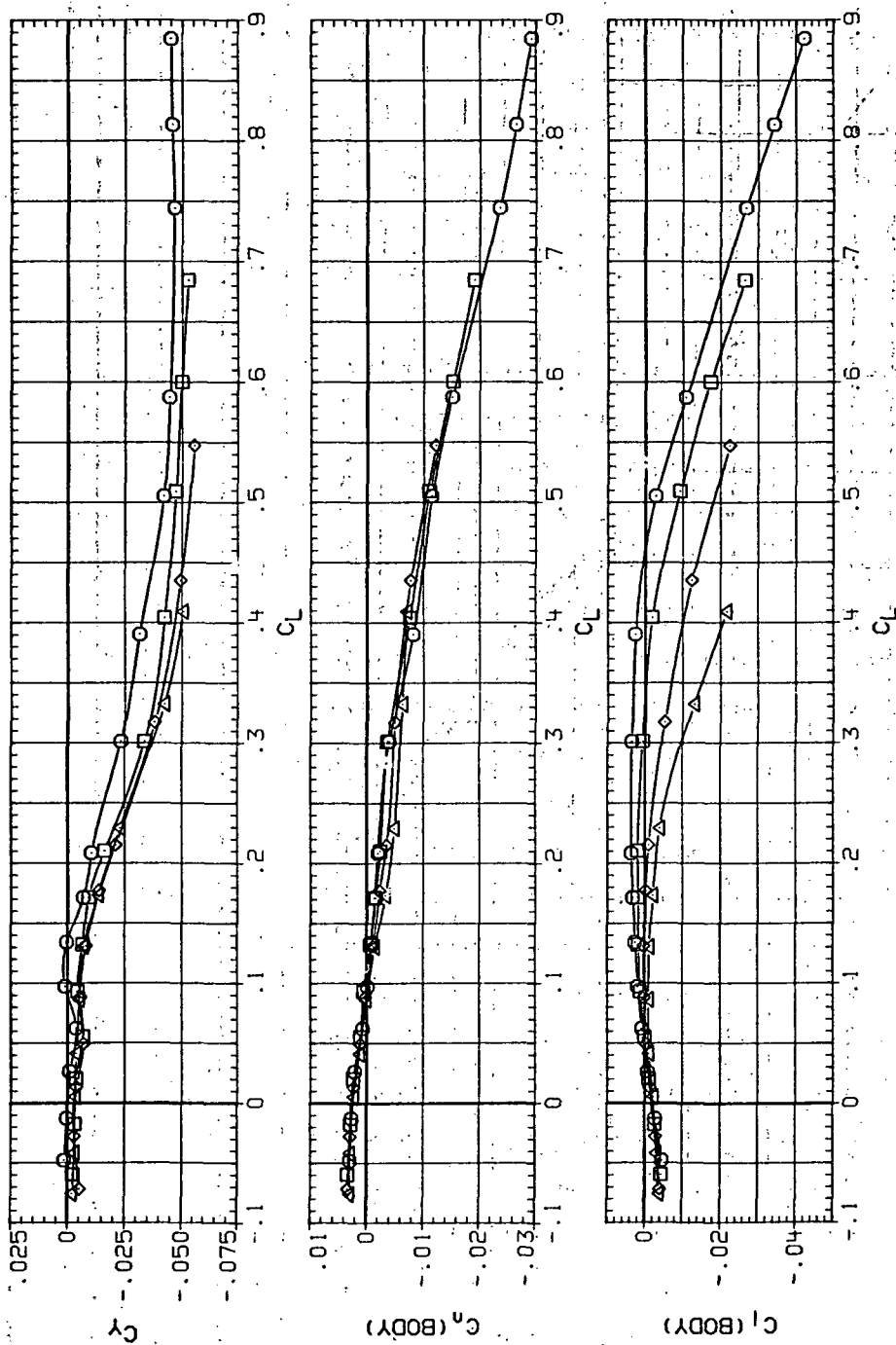
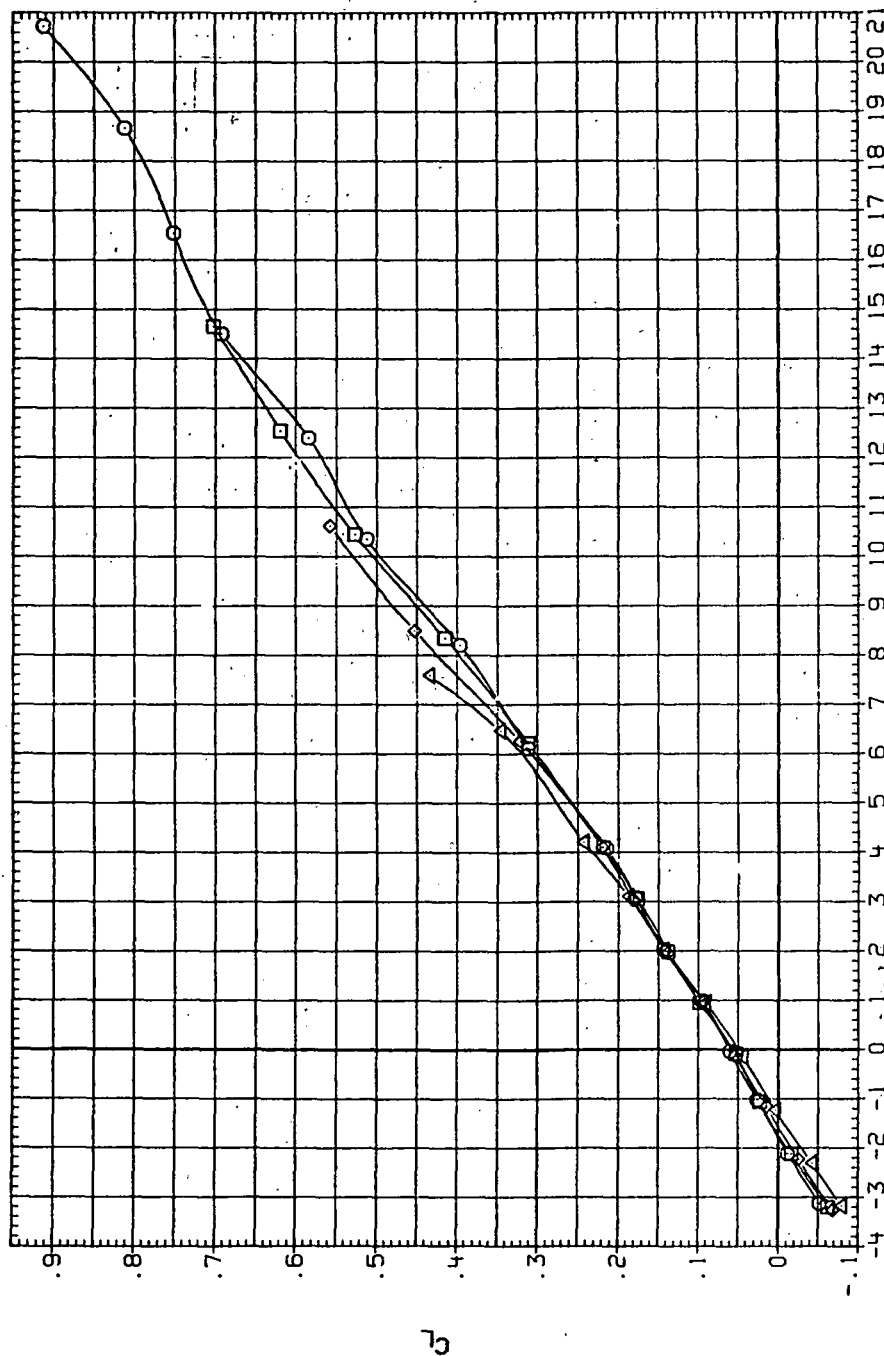
(e) C_Y , C_n and C_l vs C_L .

Figure 38.—Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR042 SH60B (AL)
 RJR082 SH60B (AL)
 RJR122 SH60B (AL)
 RJR161 SH60B (AL)

RN/L Q(NSH)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

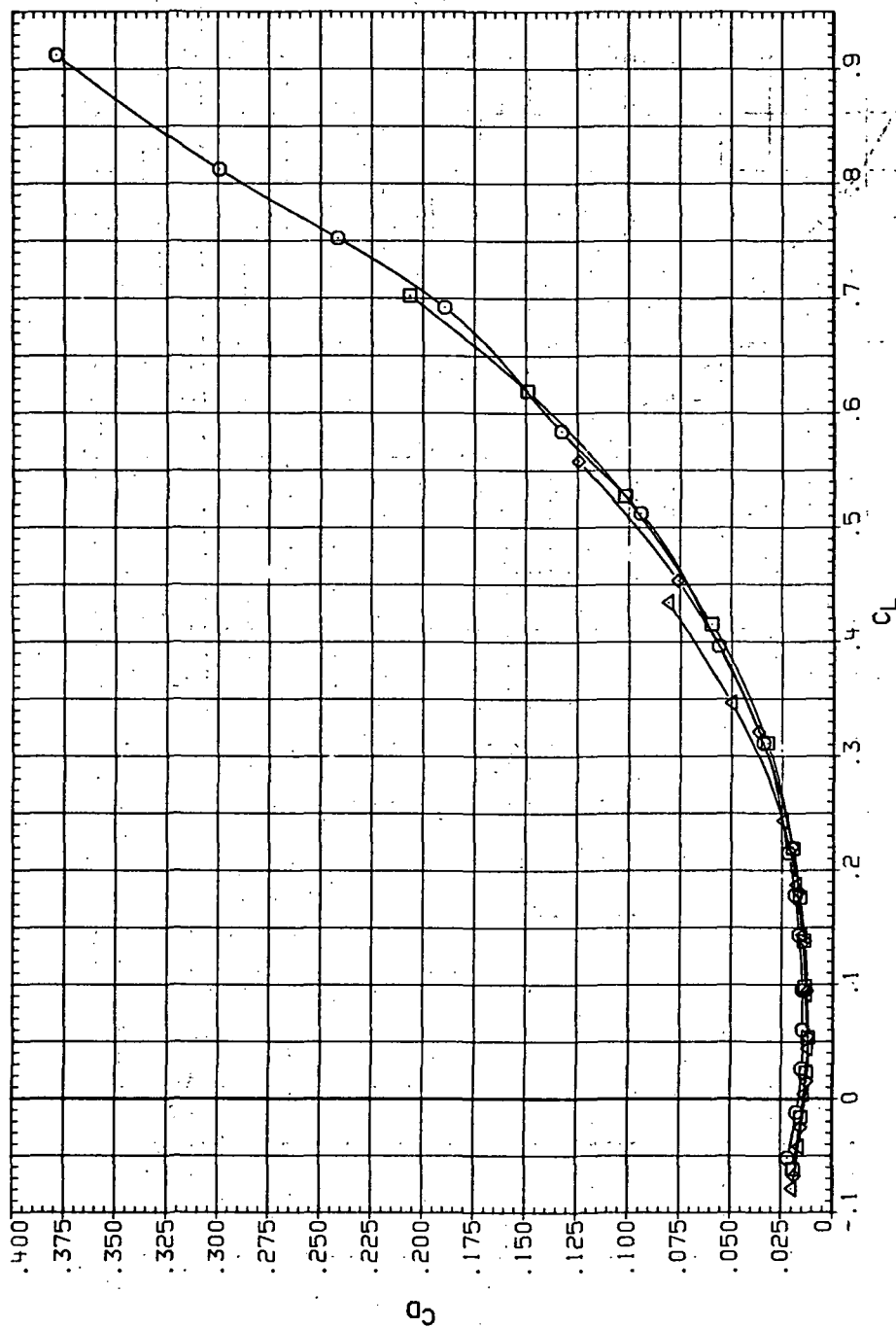


(a) C_L vs α .

Figure 39. — Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.95$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R4042 $\square$ R4508 (AL)
 R4092 $\square$ R4508 (AL)
 R4122 $\triangle$ R4508 (AL)
 R4161 $\triangle$ R4508 (AL)

RN/L Q (NSM)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

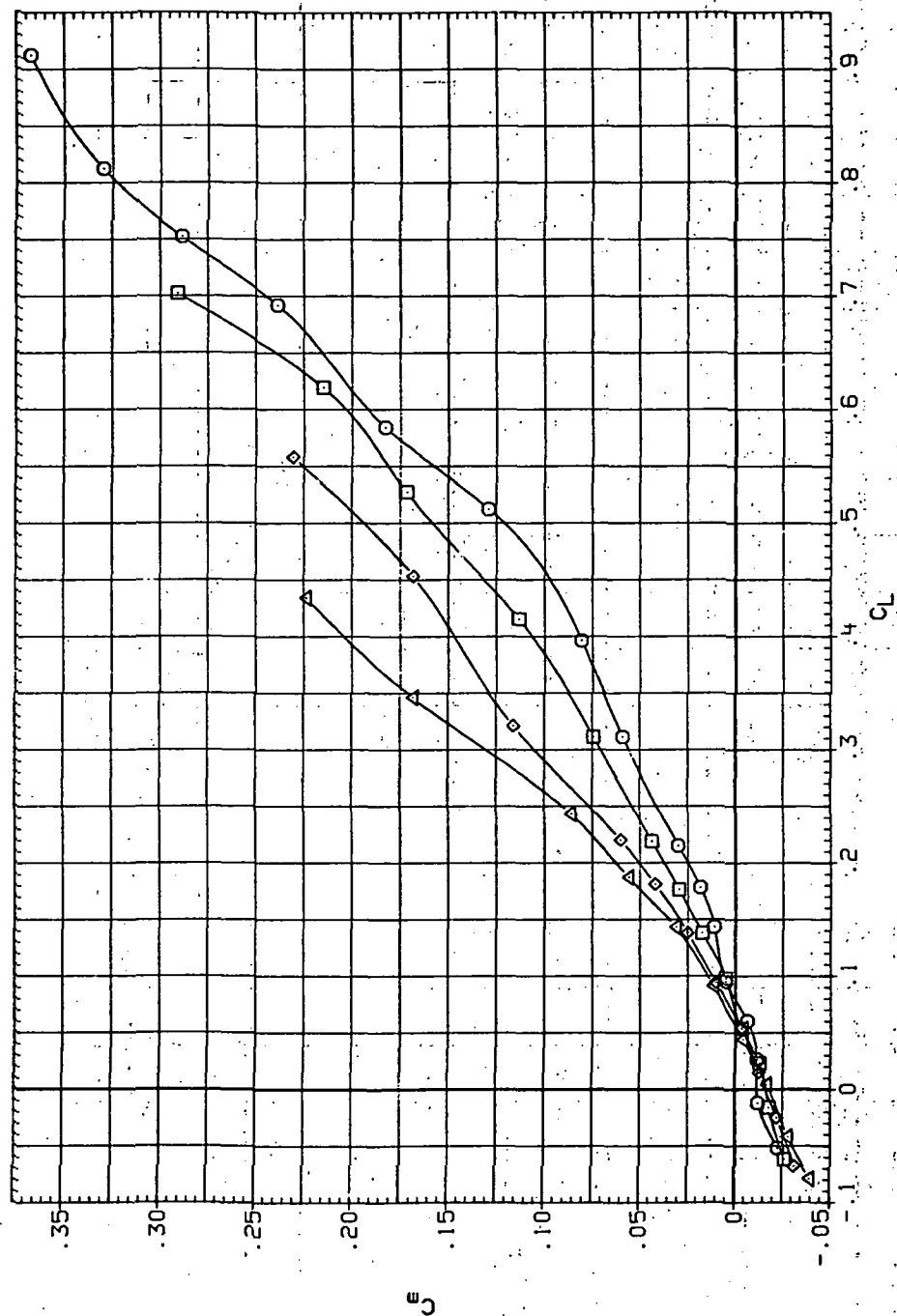


(b) C_D vs C_L

Figure 39. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR042 ○ 9H608 (AL)
 RJR082 □ 9H608 (AL)
 RJR122 ◇ 9H608 (AL)
 RJR161 △ 9H608 (AL)

RV/L Q(NSM)
 3.280 7.950
 4.590 10.900
 6.230 15.900
 8.200 19.900

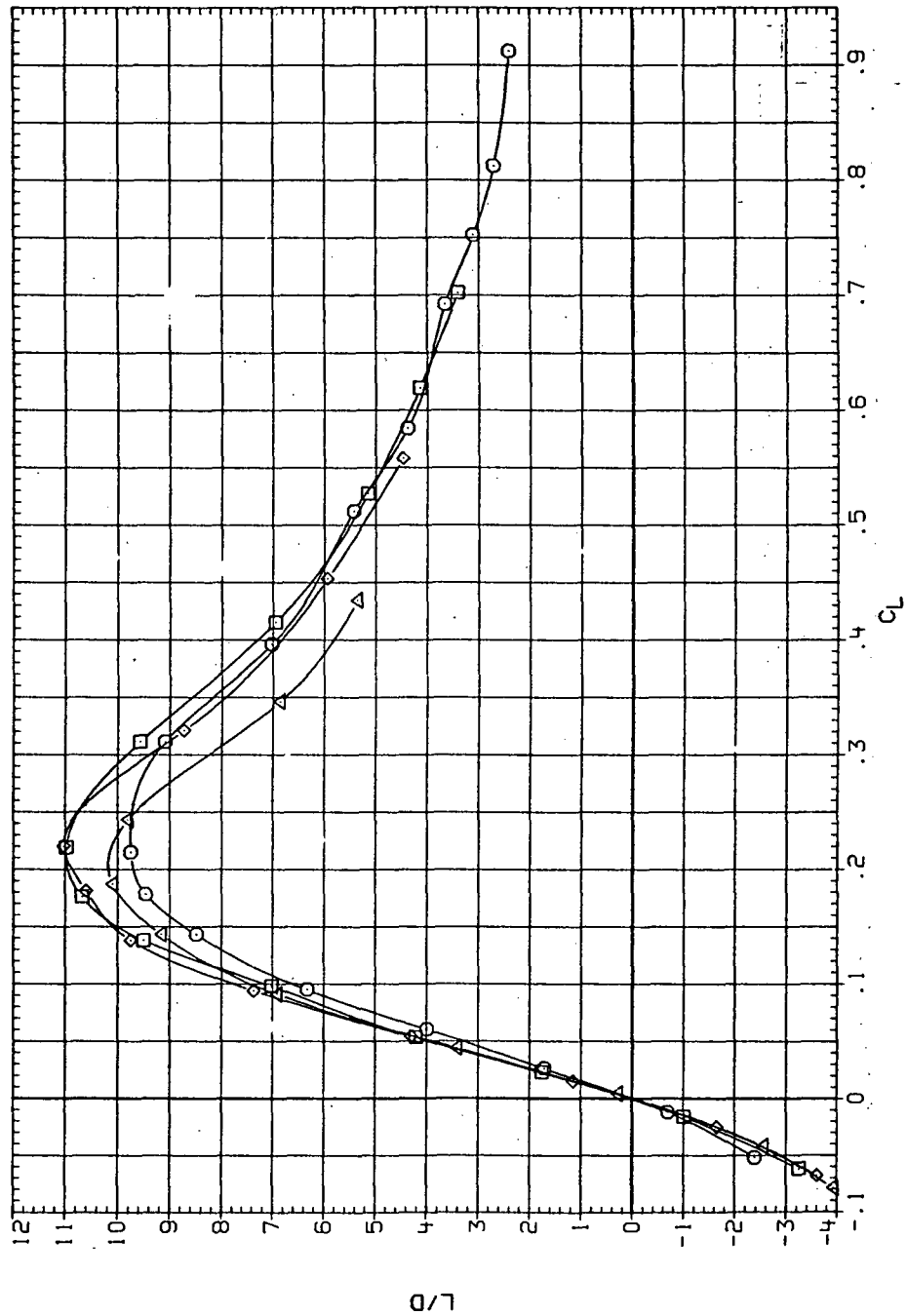


(c) C_m vs C_L

Figure 39. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR042 □ 9W50B (AL)
 RJR082 ○ 9W50B (AL)
 RJR122 ◇ 9W50B (AL)
 RJR161 △ 9W50B (AL)

RN/L Q(NSH)
 3.280 7.950
 4.590 10.900
 6.230 15.000
 8.200 19.900



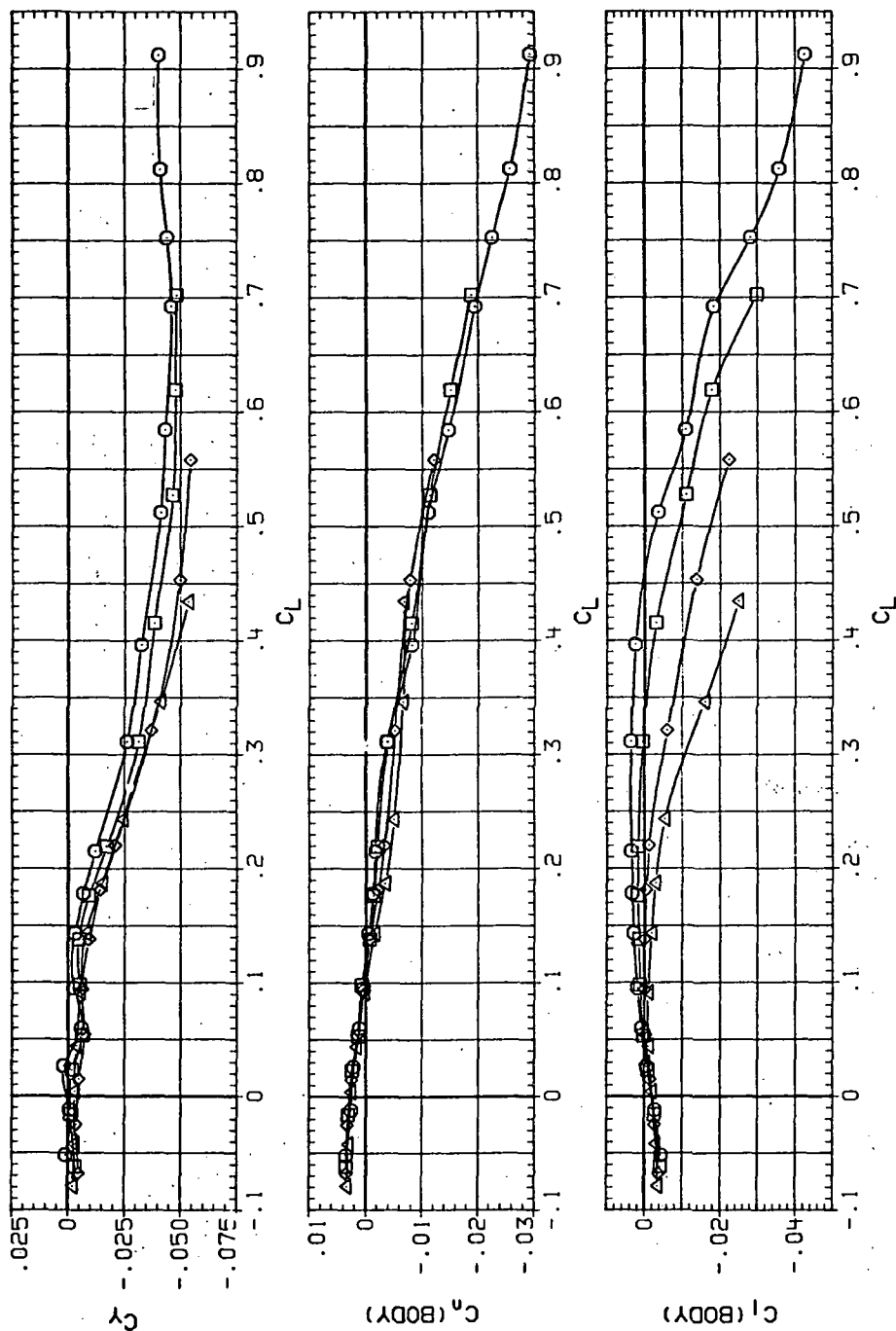
(d) L/D vs C_L .

Figure 39.— Continued.

DATA SET SYMBOL CONFIGURATION

RJ0042 94S08 (AL)
 RJ0082 94S08 (AL)
 RJ1122 94S08 (AL)
 RJ1161 94S08 (AL)

RN/L Q(NSH)
 3.280 7.960
 4.590 10.900
 6.230 15.000
 8.200 19.900

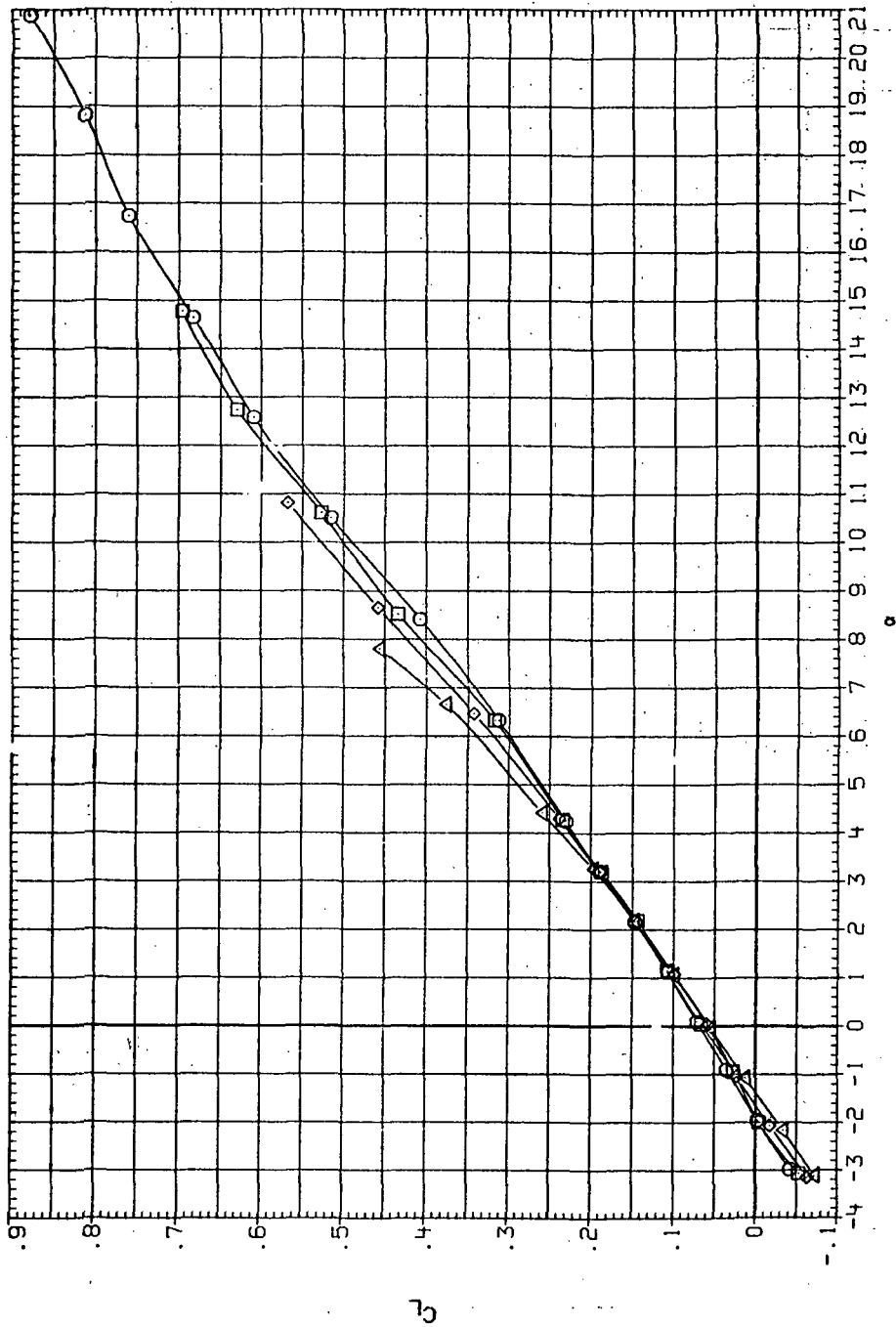


(e) C_Y , C_n and C_l vs C_L .

Figure 39. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR043 $\square$ 94608 (AL)
 RJR083 $\square$ 94608 (AL)
 RJR123 $\square$ 94608 (AL)
 RJR162 $\square$ 94608 (AL)

RN/L Q(NSH)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

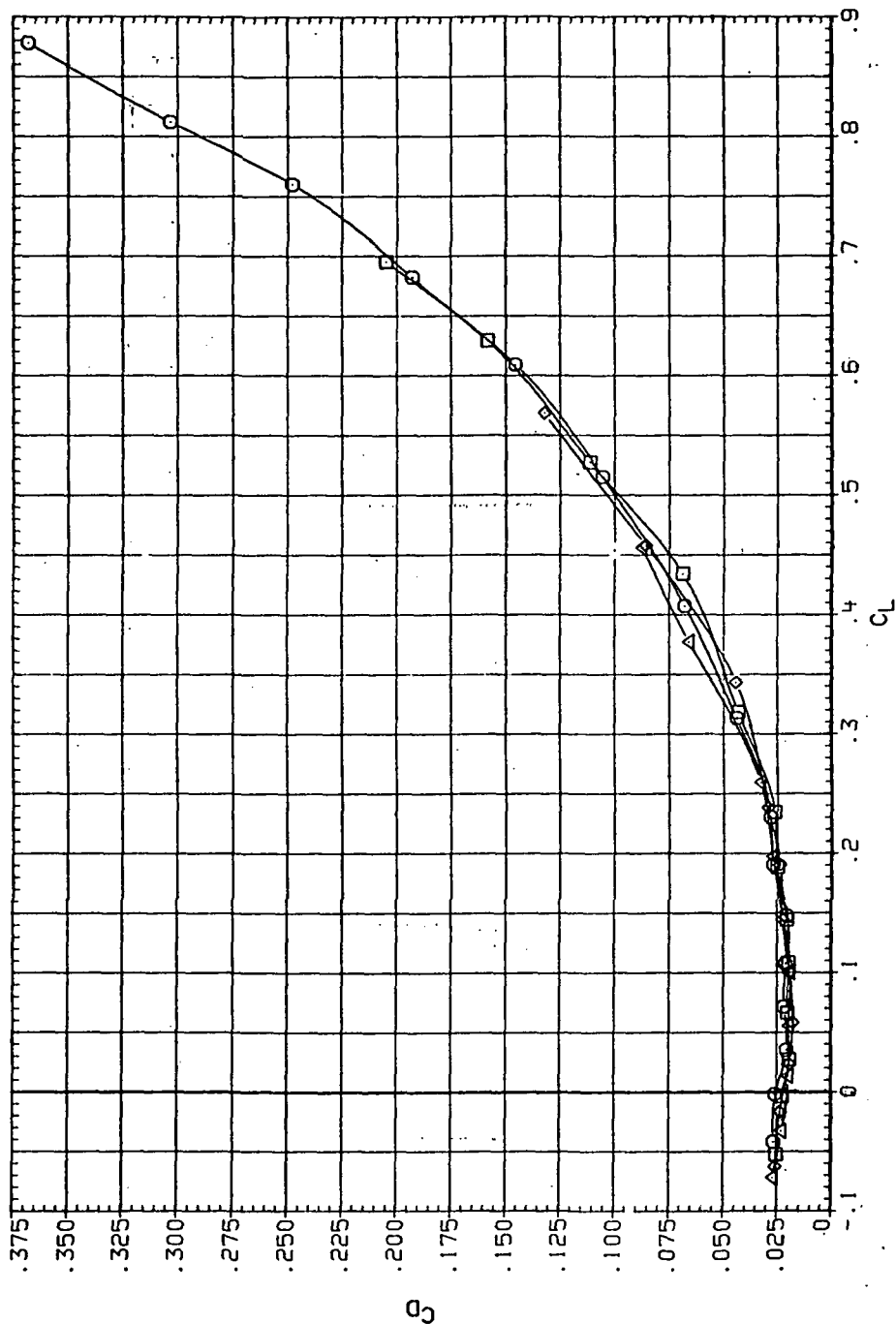


(a) C_L vs α .

Figure 40.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.1$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR043 ○ 9M508 (AL)
 RJR083 □ 9M508 (AL)
 RJR123 ◇ 9M508 (AL)
 RJR162 △ 9M508 (AL)

RV/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200



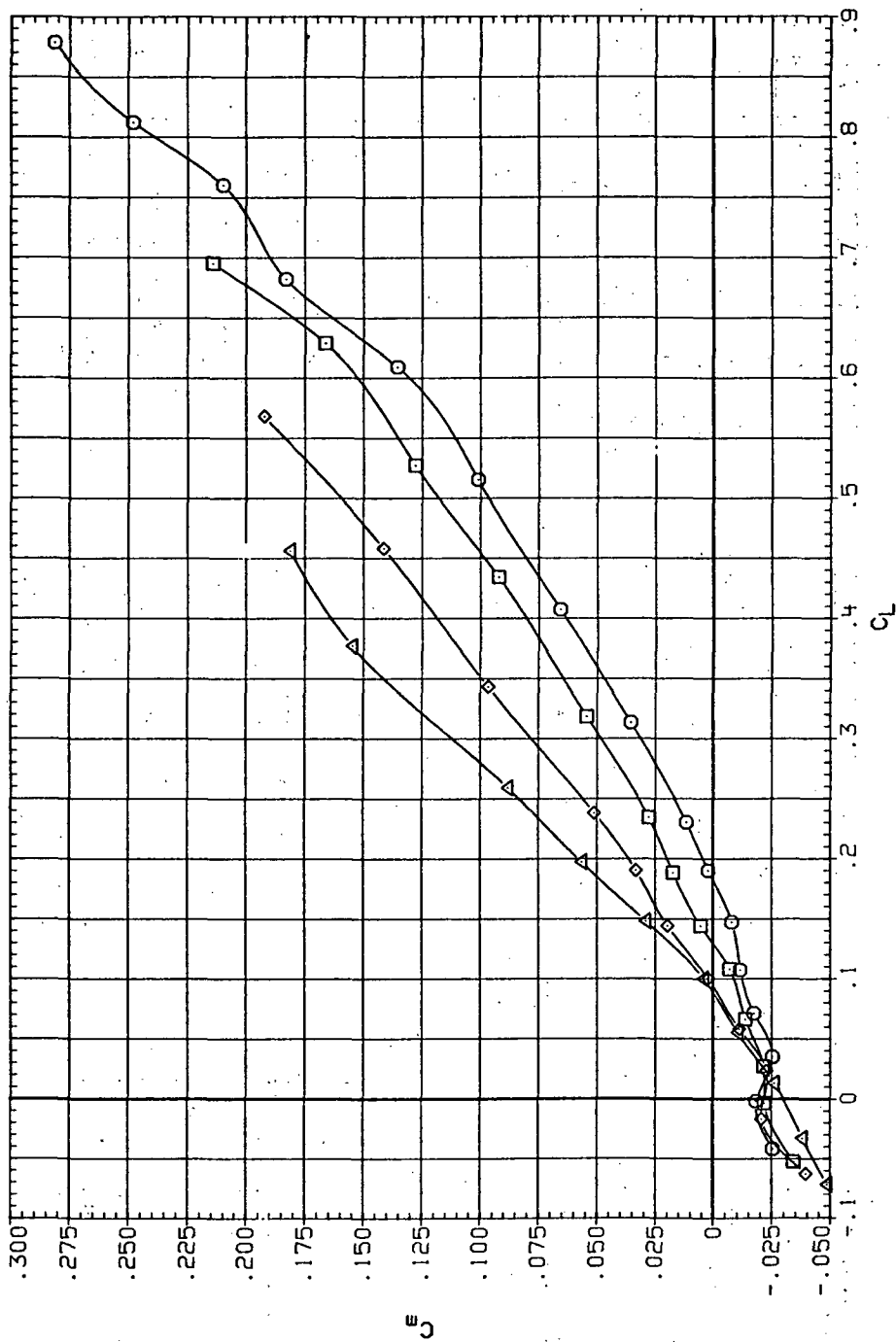
(b) C_D vs C_L .

Figure 40.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR043 ○ 9M60B (AL)
 RJR083 □ 9M60B (AL)
 RJR123 ◇ 9M60B (AL)
 RJR162 △ 9M60B (AL)

RV/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200

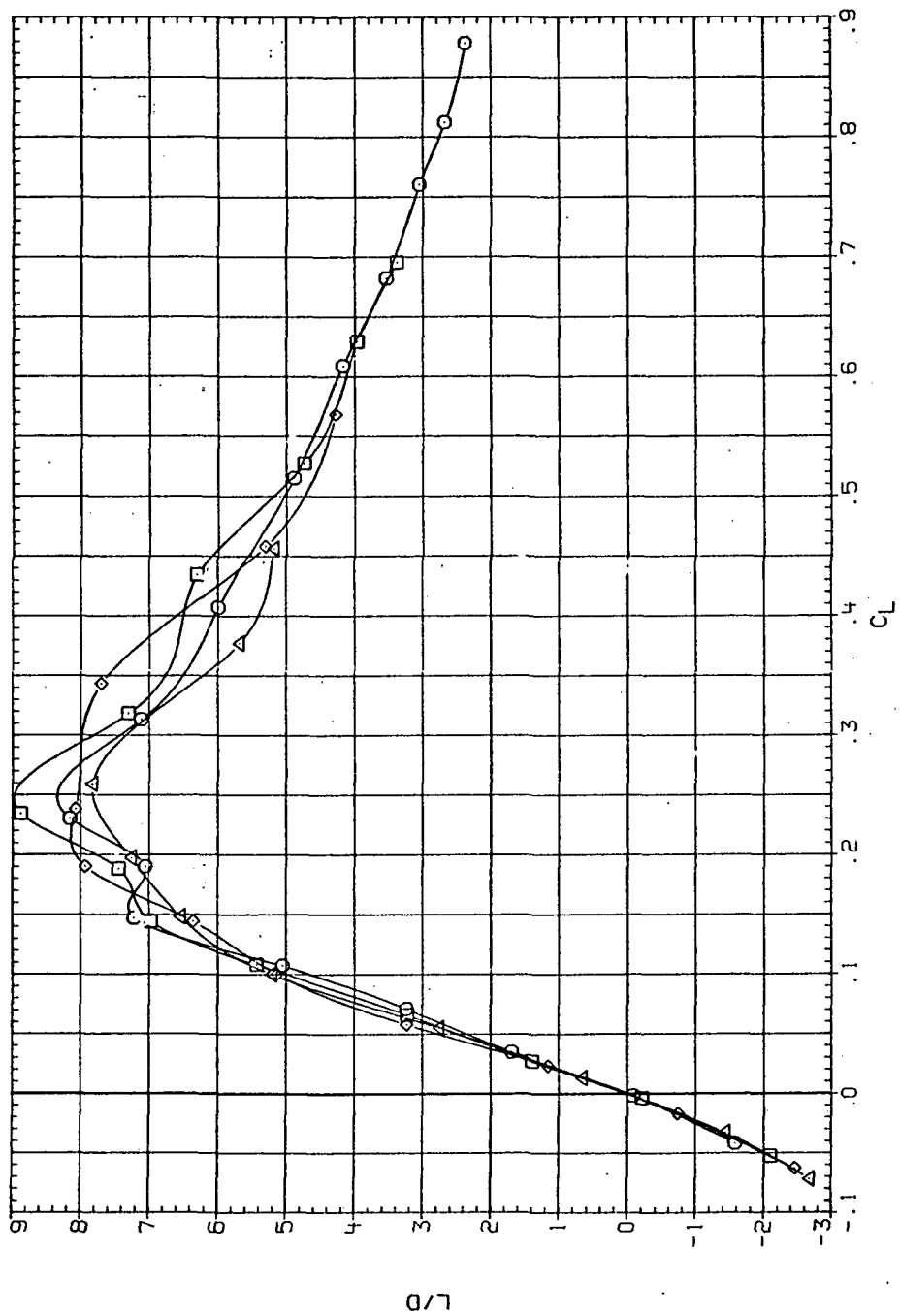


(c) C_m vs C_L .

Figure 40.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR043 SHS08 (AL)
 RJR083 SHS08 (AL)
 RJR123 SHS08 (AL)
 RJR162 SHS08 (AL)

RN/L Q(NSM)
 3.280 8.450
 4.590 11.900
 6.230 16.400
 8.200 21.200



(d) L/D vs C_L .

Figure 40.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR043
RJR083
RJR123
RJR162

94608 (AL)
94608 (AL)
94608 (AL)
94608 (AL)

RN/L Q(NSM)
3.280 8.450
4.590 11.900
6.230 16.400
8.200 21.200

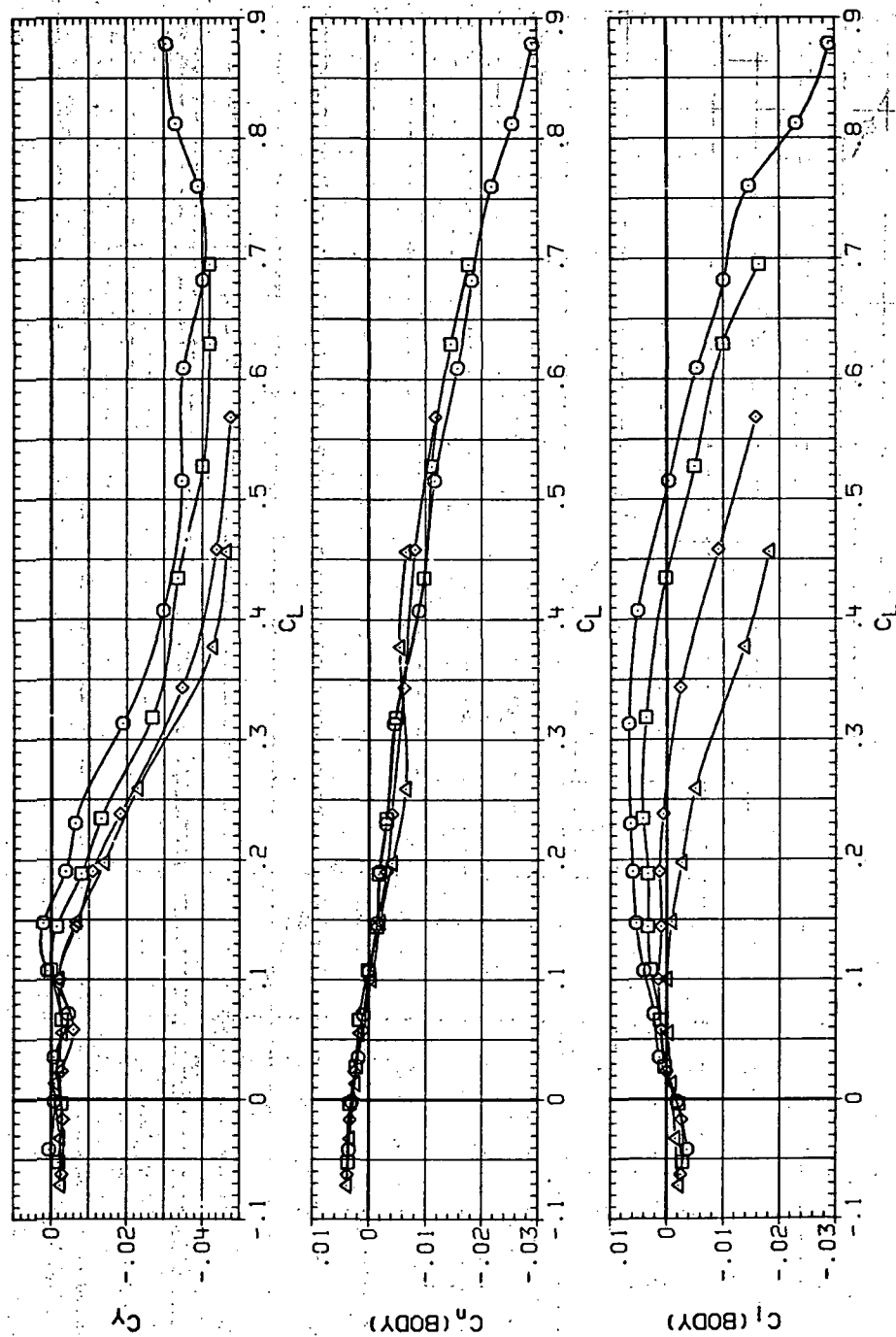
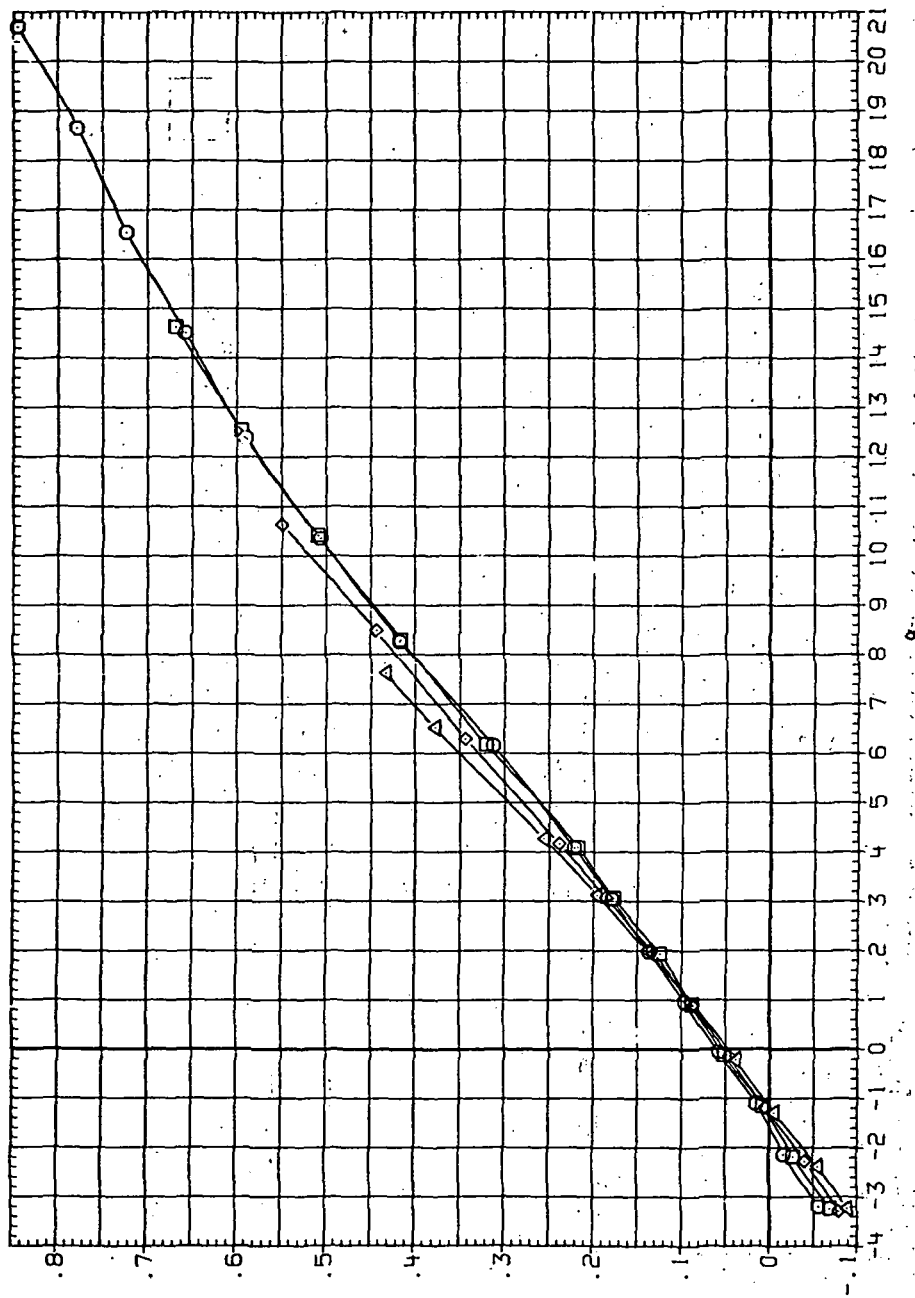
(e) C_Y , C_n and C_l vs C_L .

Figure 40. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR044 $\square$ SH508 (AL)
 RJR084 $\diamond$ SH508 (AL)
 RJR124 $\triangle$ SH508 (AL)
 RJR163 $\triangle$ SH508 (AL)

RN/L Q (NSM)
 3.260 8.960
 4.590 12.400
 6.230 17.000
 8.200 22.800



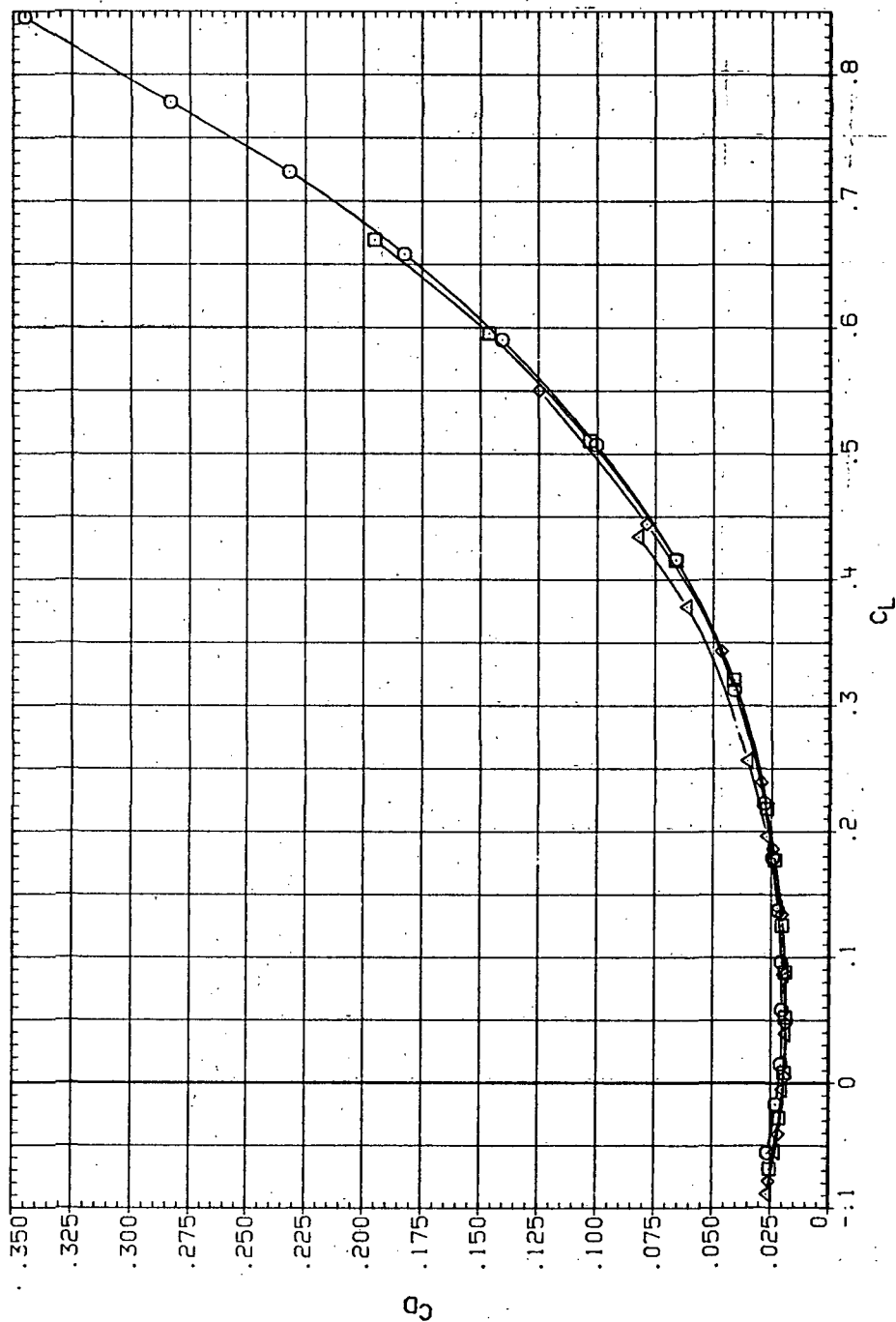
(a) C_L vs α .

Figure 41.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.2$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION

RJR044 ○ 9M608 (AL)
 RJR084 □ 9M608 (AL)
 RJR124 ◇ 9M608 (AL)
 RJR163 △ 9M608 (AL)

RV/L 0.1(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



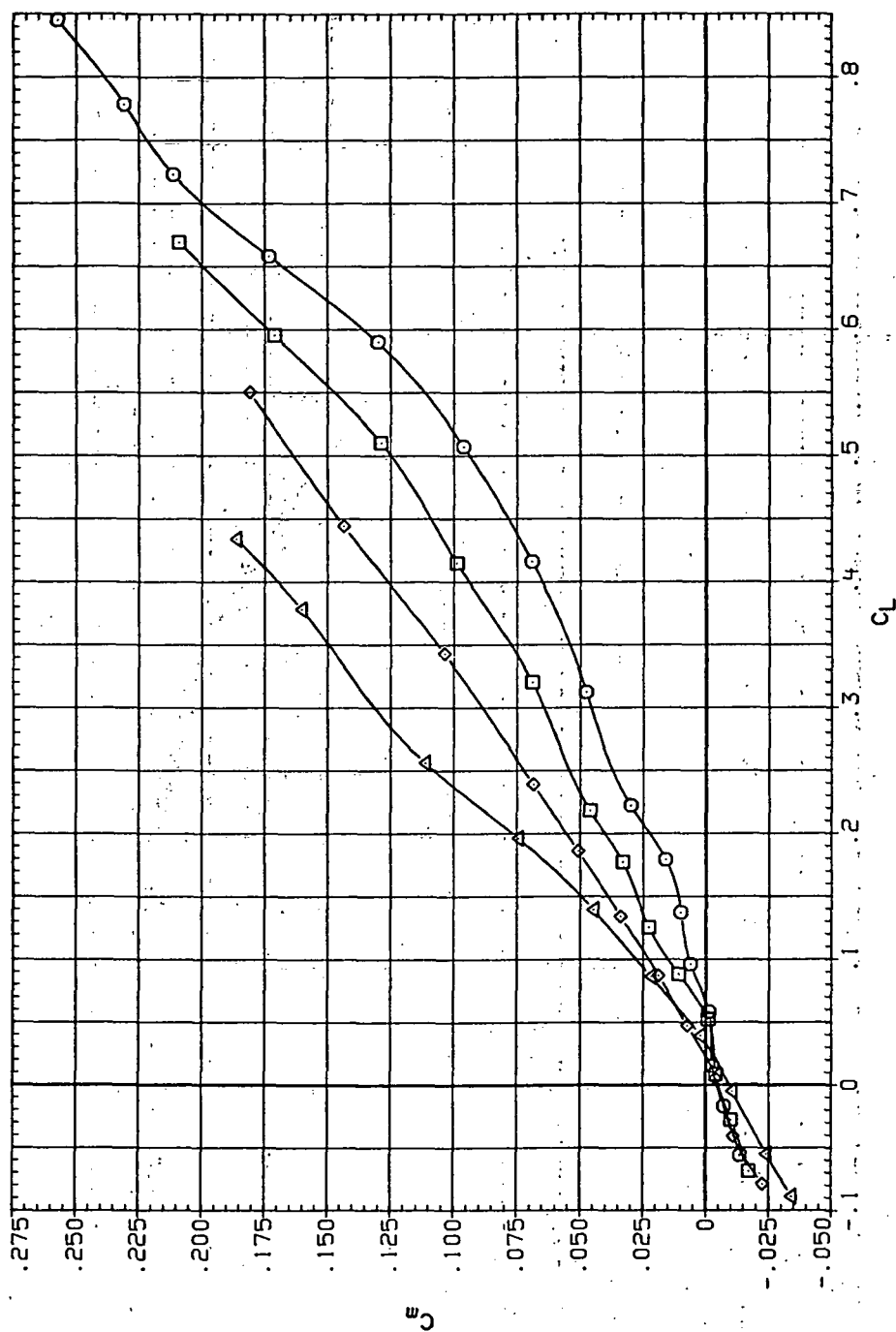
(b) C_D vs C_L .

Figure 41.— Continued.

DATA SET SYMBOL CONFIGURATION

RJR044 ◻ 94508 (AL)
 RJR084 ◻ 94508 (AL)
 RJR124 ◻ 94508 (AL)
 RJR163 △ 94508 (AL)

RN/L Q(NSM)
 3.280 8.980
 4.590 12.400
 6.230 17.000
 8.200 22.800



(c) C_m vs C_L

Figure 41.— Continued.

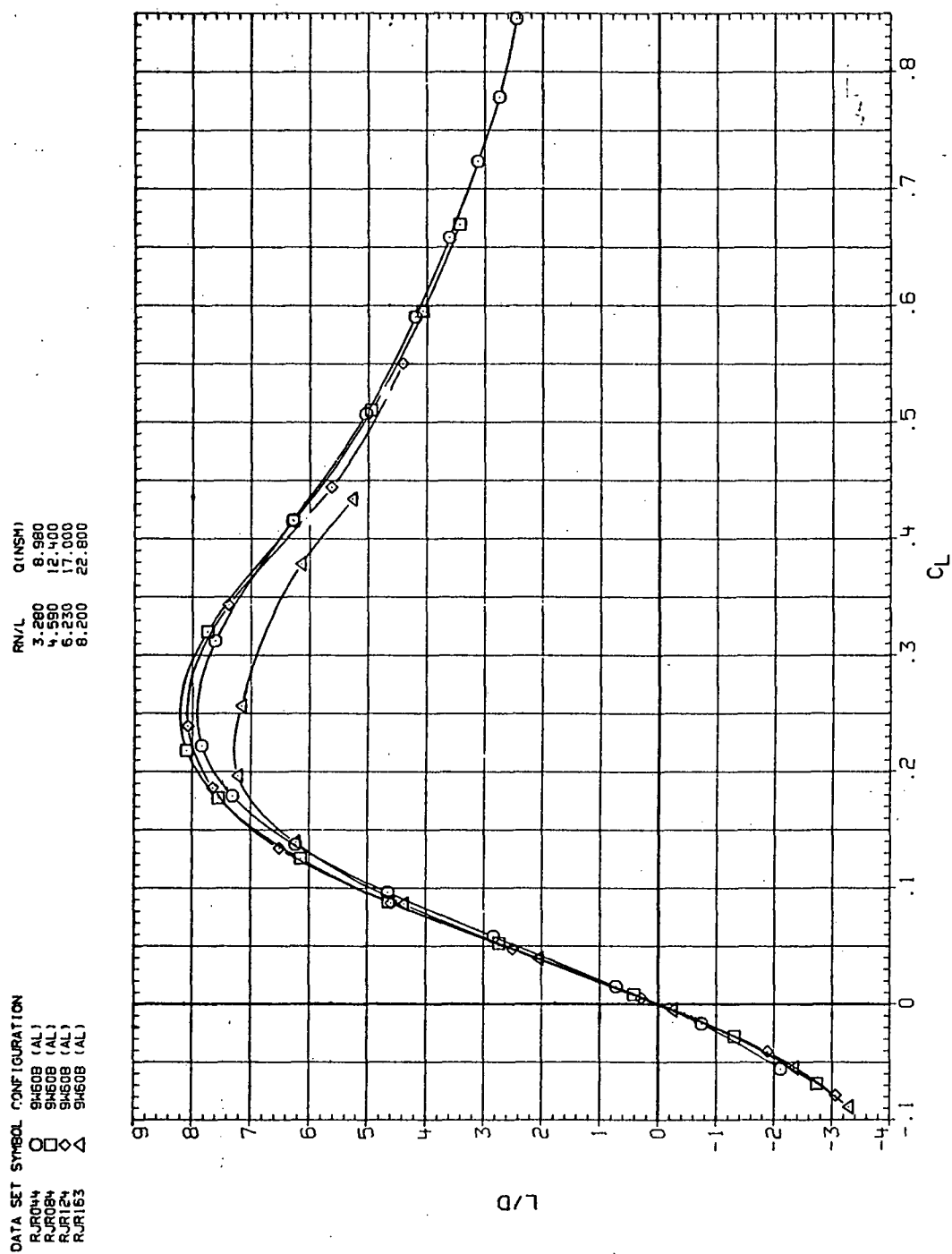
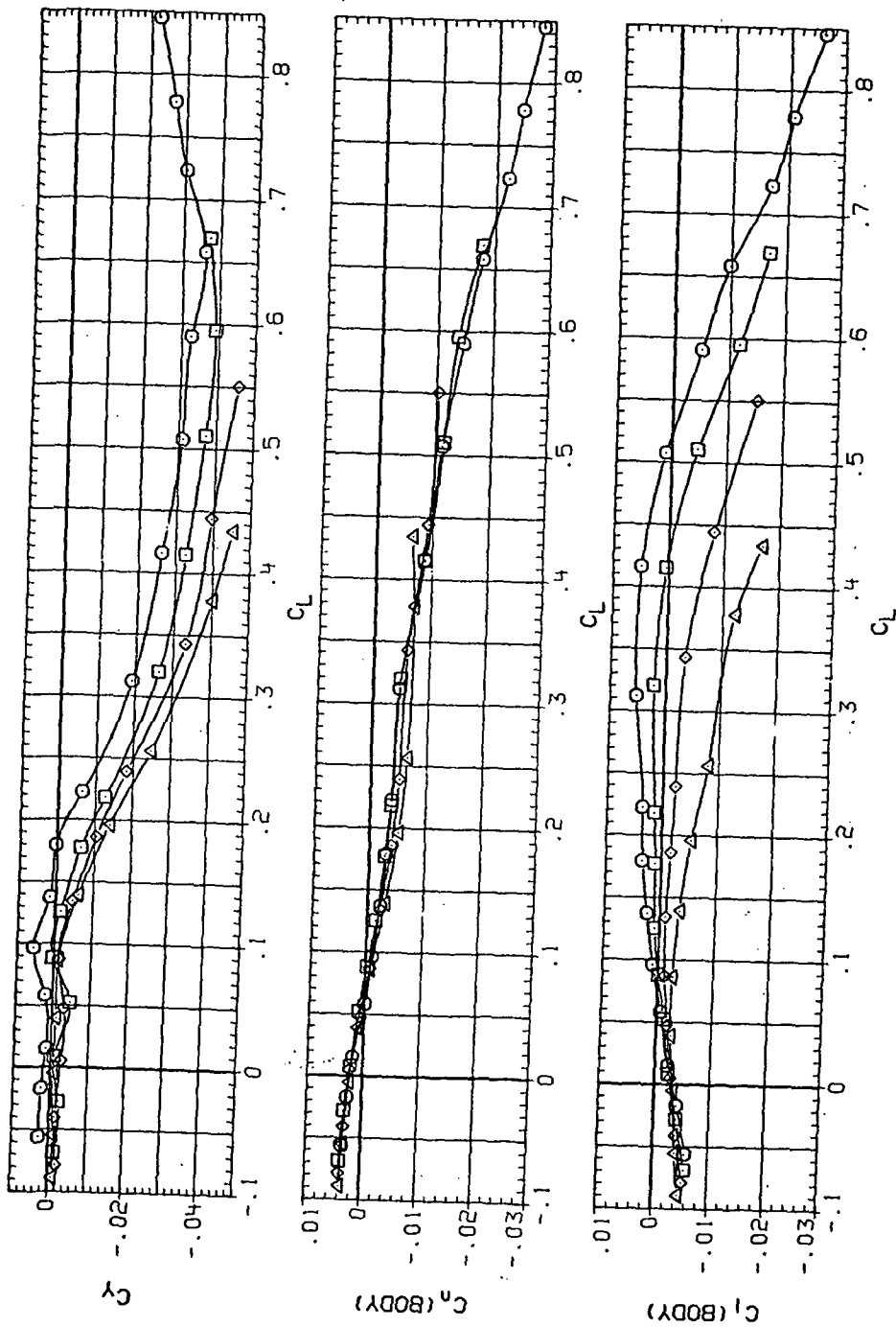
(d) L/D vs C_L .

Figure 41.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR044 SHSOB (AL)
 RJR084 SHSOB (AL)
 RJR124 SHSOB (AL)
 RJR163 SHSOB (AL)

RN/L Q(NSH)
 3 280 8 580
 4 580 12 400
 6 220 22 800
 8 200

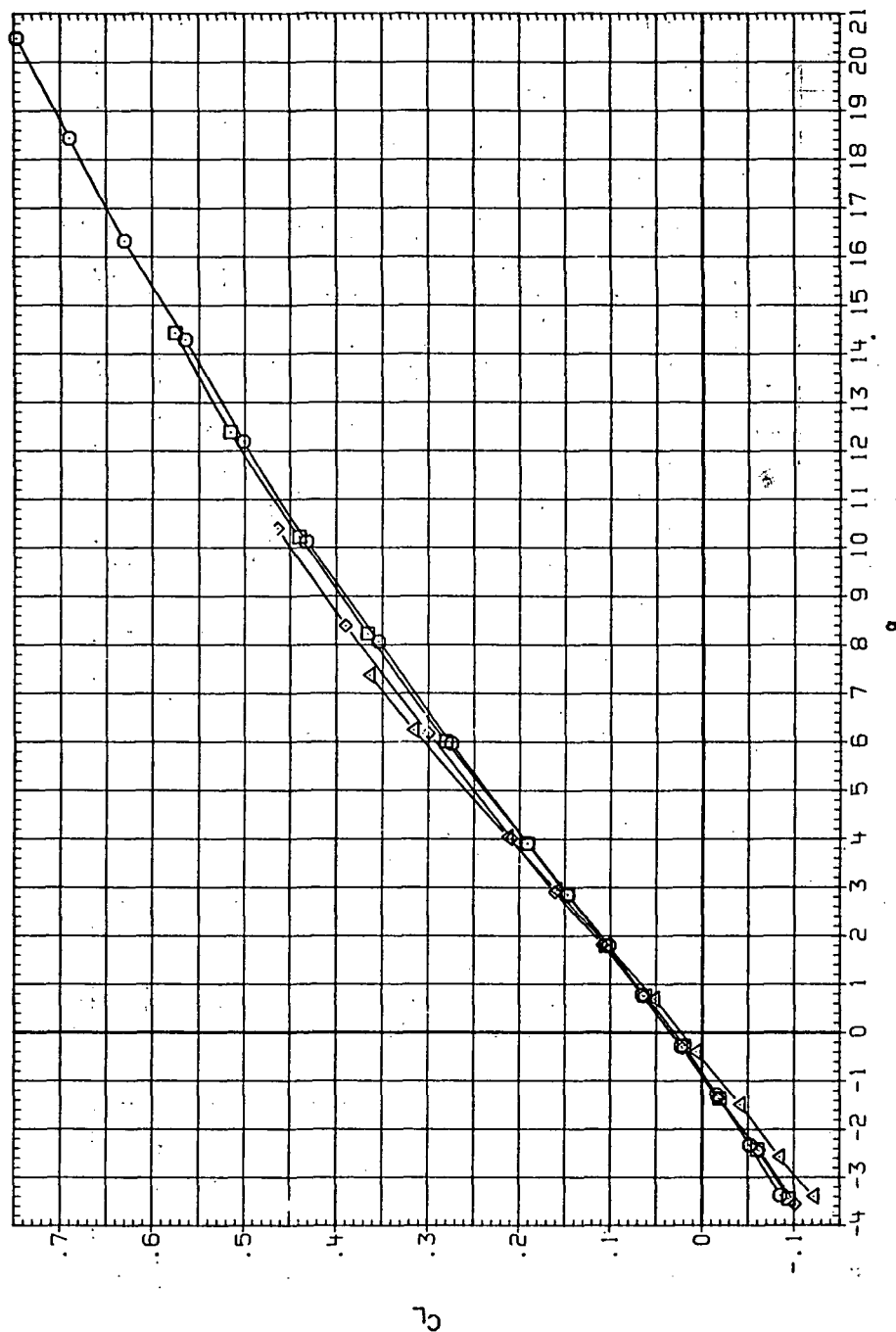


(e) C_Y , C_n and C_l vs C_L .

Figure 41. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR045 $\square$ 9460B (AL)
 RJR085 $\square$ 9460B (AL)
 RJR125 $\diamond$ 9460B (AL)
 RJR164 $\triangle$ 9460B (AL)

RN/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.900

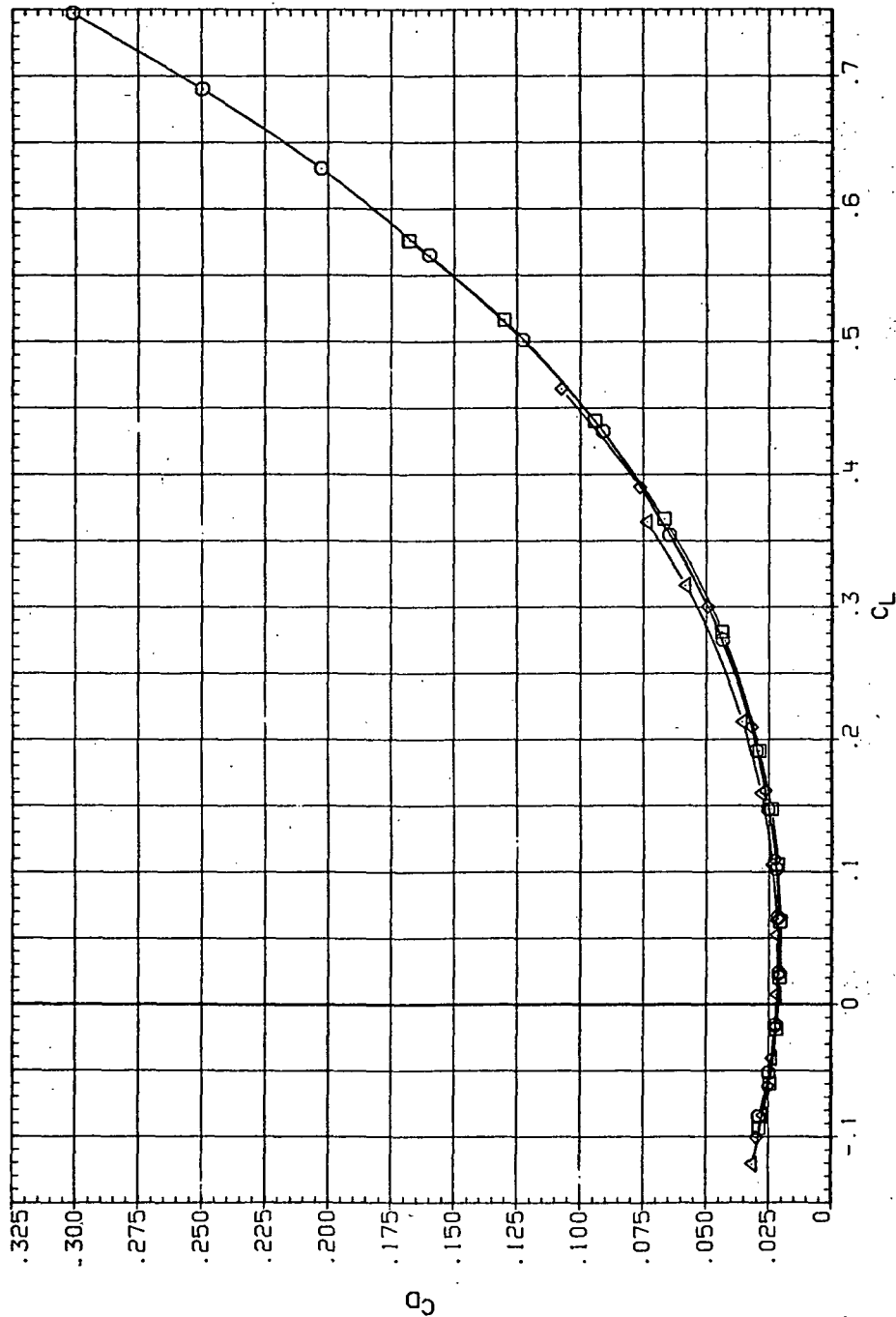


(a) C_L vs α .

Figure 42.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR045 ○ 9M608 (AL)
 RJR085 □ 9M608 (AL)
 RJR125 ◇ 9M608 (AL)
 RJR164 △ 9M608 (AL)

RV/L Q (NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

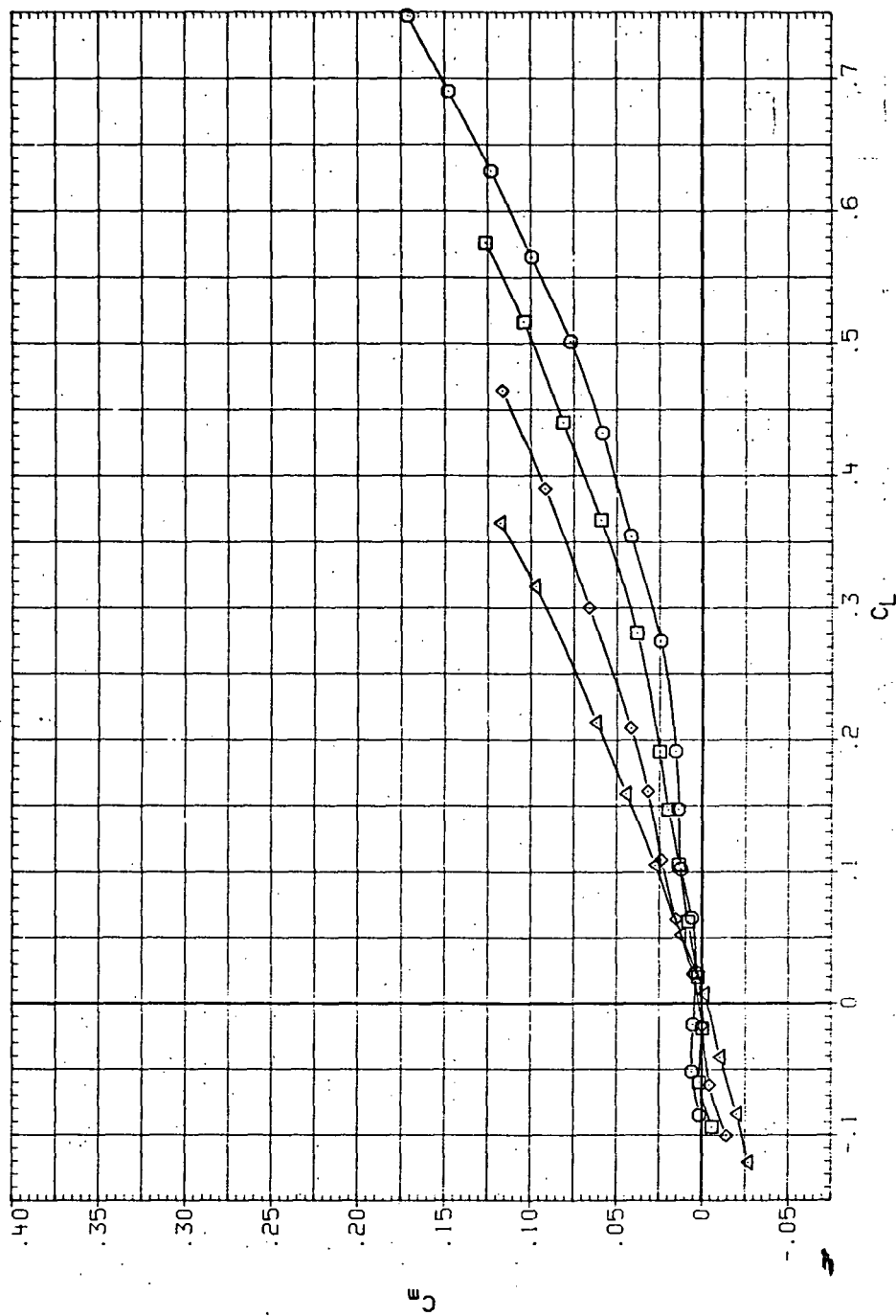


(b) C_D vs C_L

Figure 42.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR045 ○ 94608 (AL)
 RJR085 □ 94608 (AL)
 RJR125 ◇ 94608 (AL)
 RJR164 △ 94608 (AL)

RM/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

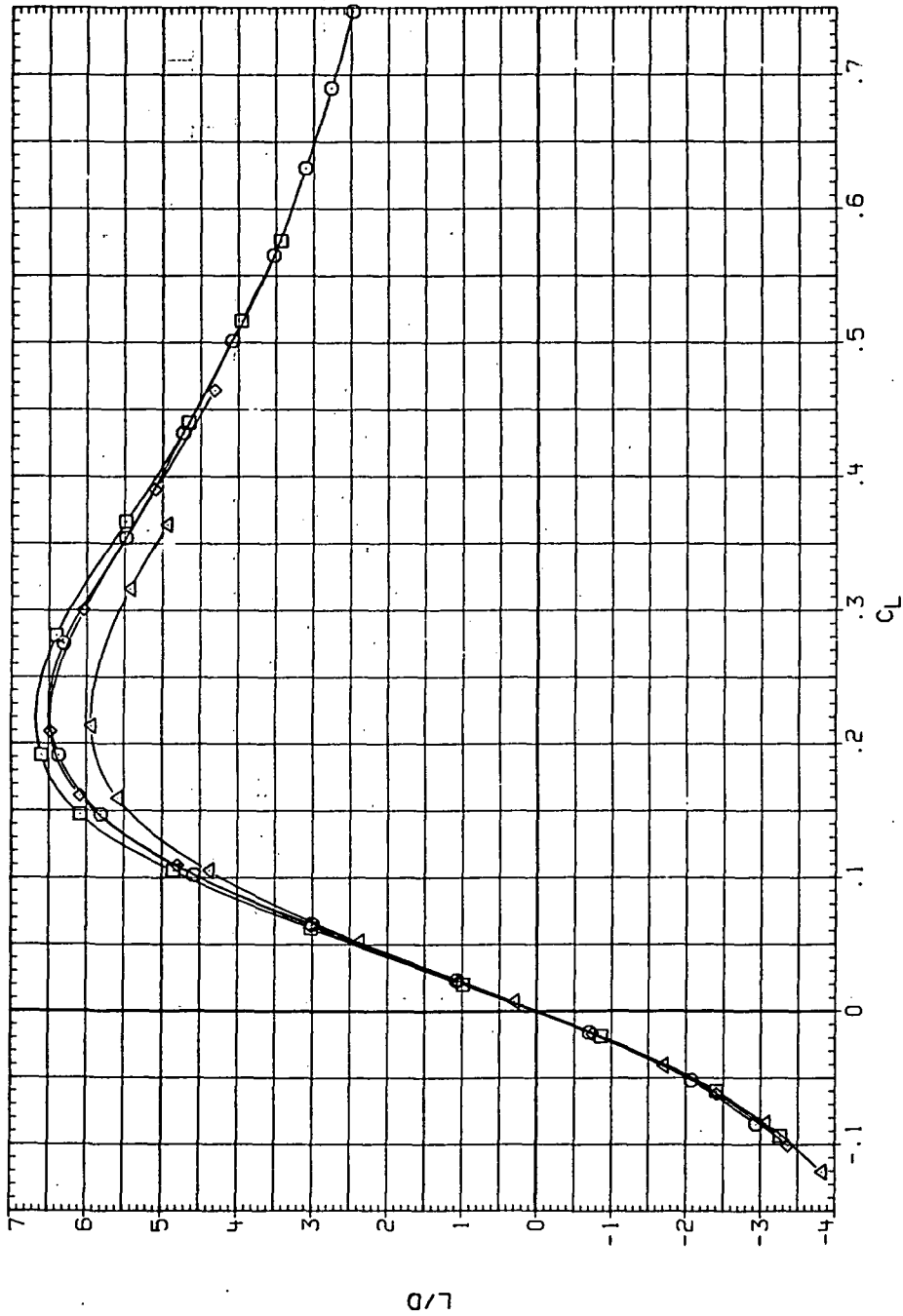


(c) C_m vs C_L

Figure 42.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR005 $\square$ S4608 (AL)
 RJR005 $\square$ S4608 (AL)
 RJR123 $\triangle$ S4608 (AL)
 RJR164 $\triangle$ S4608 (AL)

RN/L Q(NSM)
 3.280 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

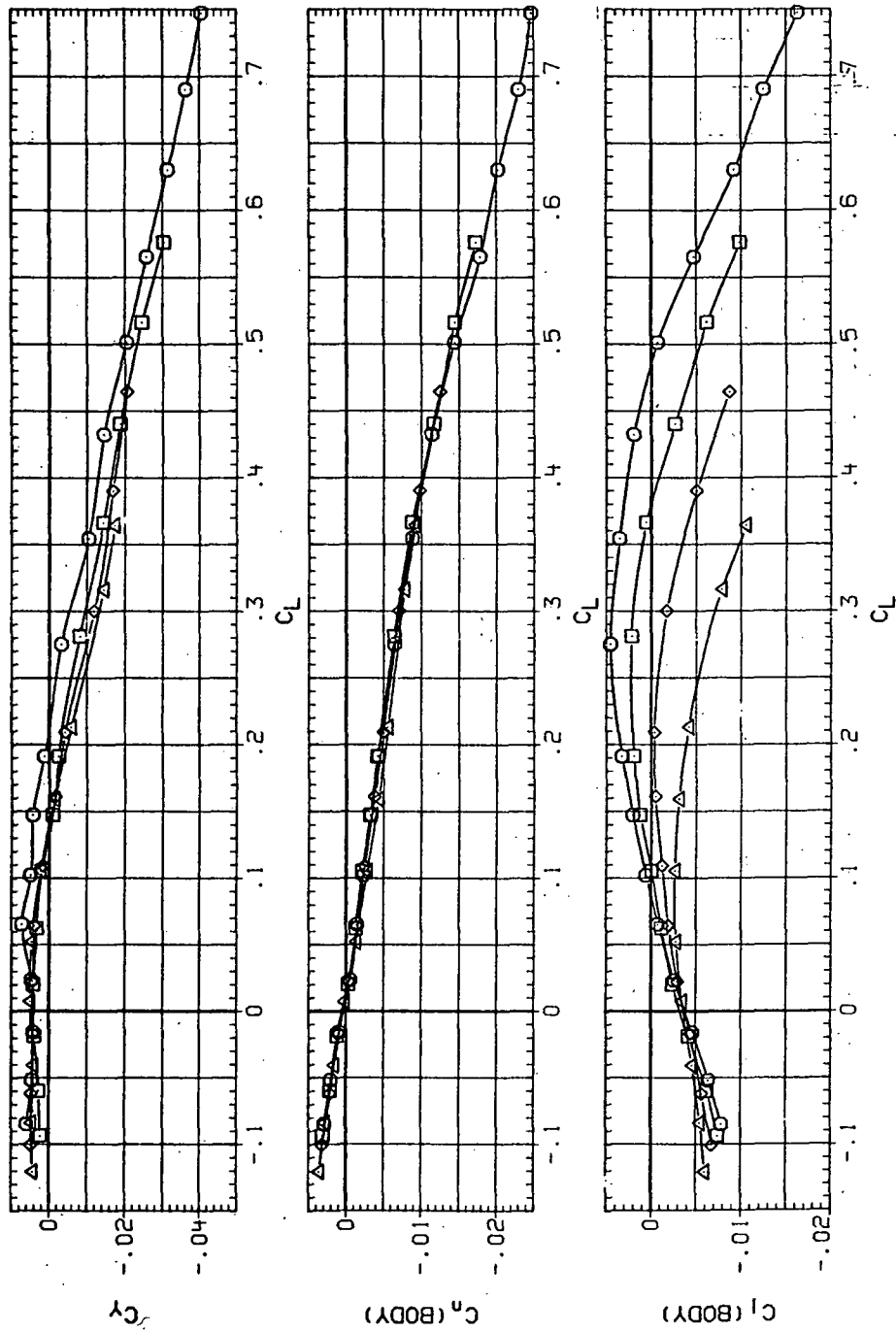


(d) L/D vs C_L .

Figure 42.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR045 54608 (AL)
 RJR085 94608 (AL)
 RJR125 94608 (AL)
 RJR164 94608 (AL)

RM/L Q(NSM)
 3.260 9.420
 4.590 13.400
 6.230 18.600
 8.200 24.400

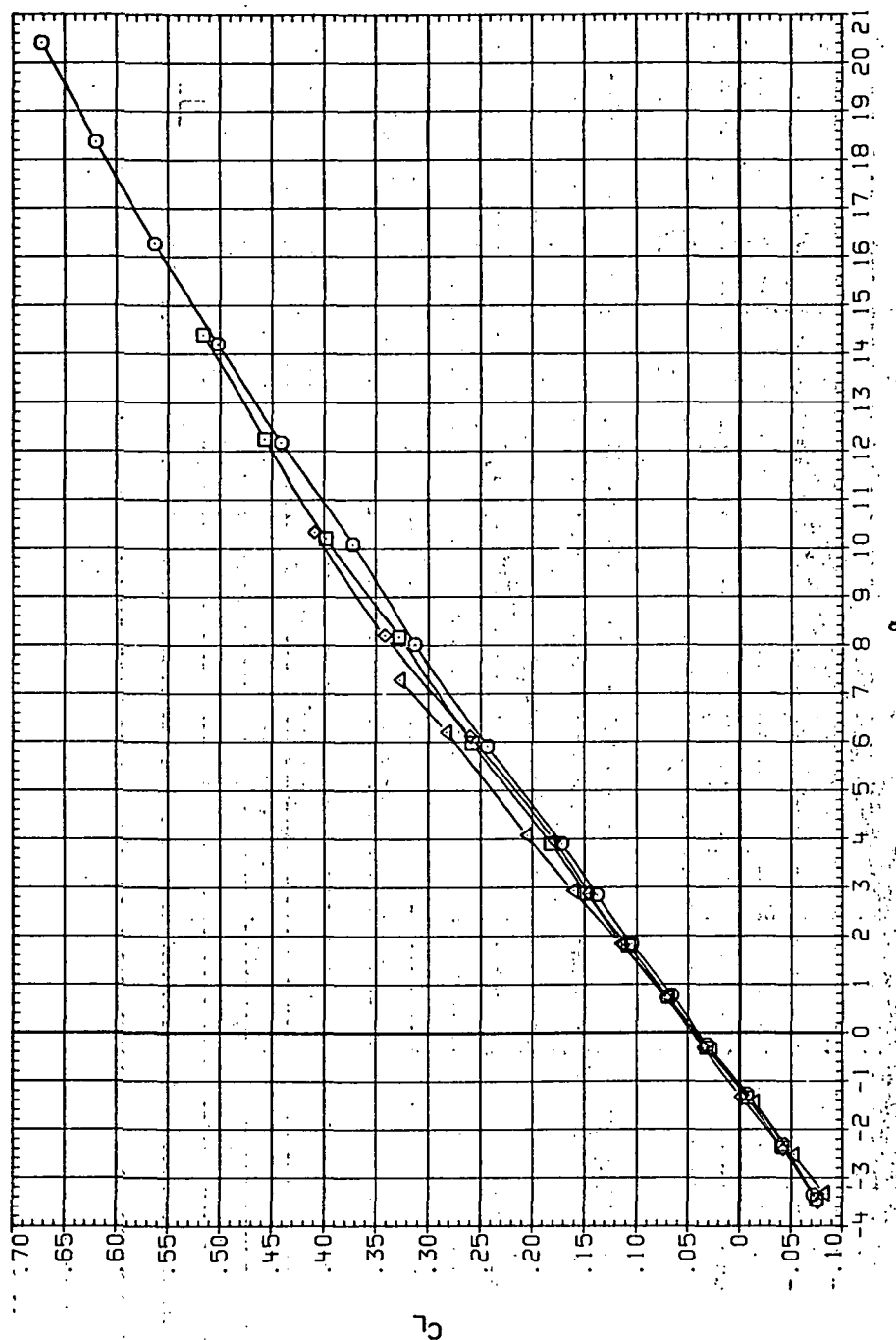


(e) $\bar{C}_Y$, C_n and C_l vs C_L .

Figure 42.— Concluded.

DATA SET SYMBOL CONFIGURATION
 R4046 $\square$ 64608 (AL)
 R4046 $\square$ 64608 (AL)
 R4126 $\square$ 64608 (AL)
 R4126 $\square$ 64608 (AL)

RN/L Q(NSM)
 3.280 9.450
 4.350 13.500
 6.230 18.500
 8.200 24.700

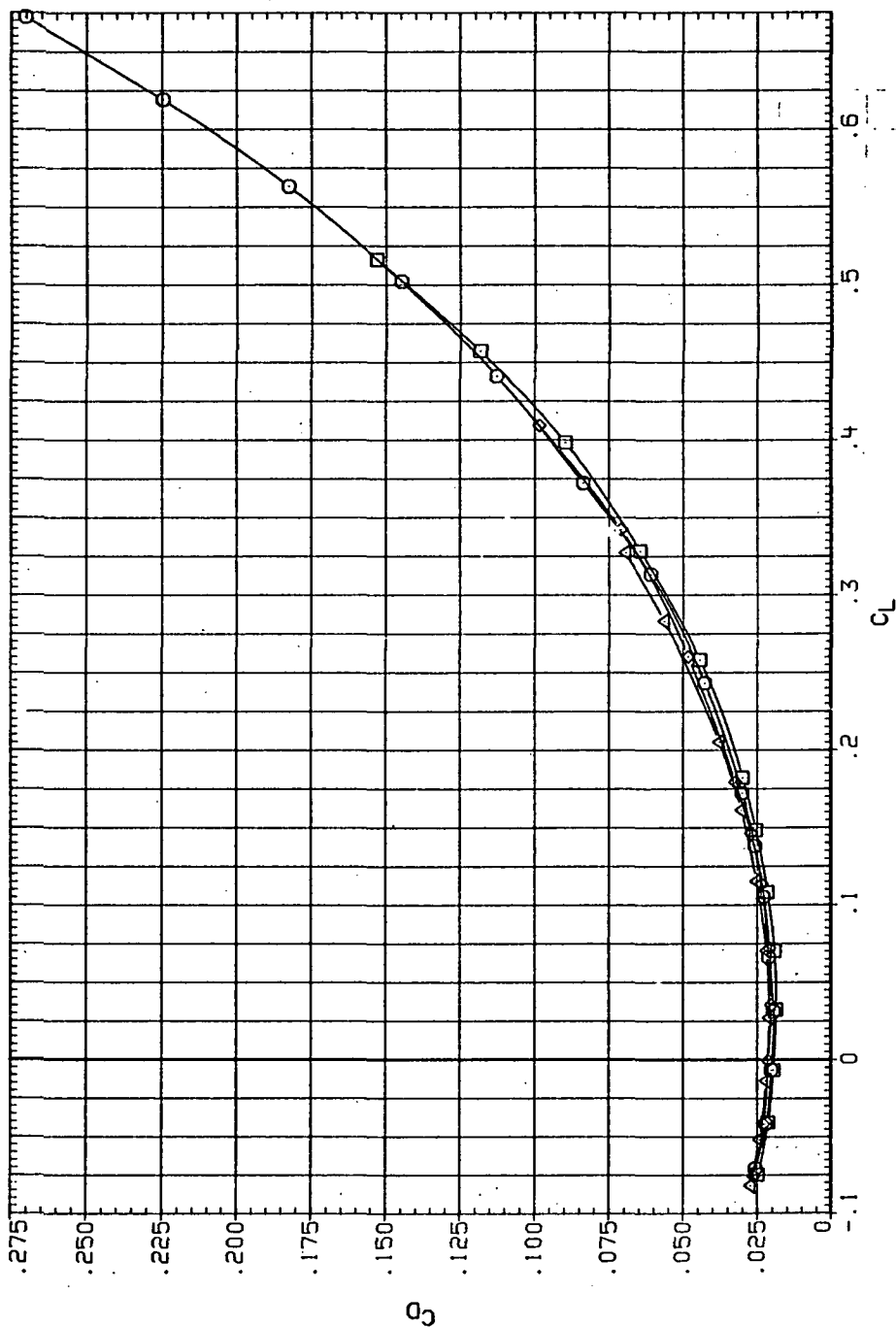


(a) C_L vs α

Figure 43.— Dynamic-pressure effects on the aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 2.0$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CO-FIGURATION
 RJR046 $\square$ 94608 (AL)
 RJR086 $\square$ 94608 (AL)
 RJR126 $\triangle$ 94608 (AL)
 RJR165 $\triangle$ 94608 (AL)

RN/L Q (NSM)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

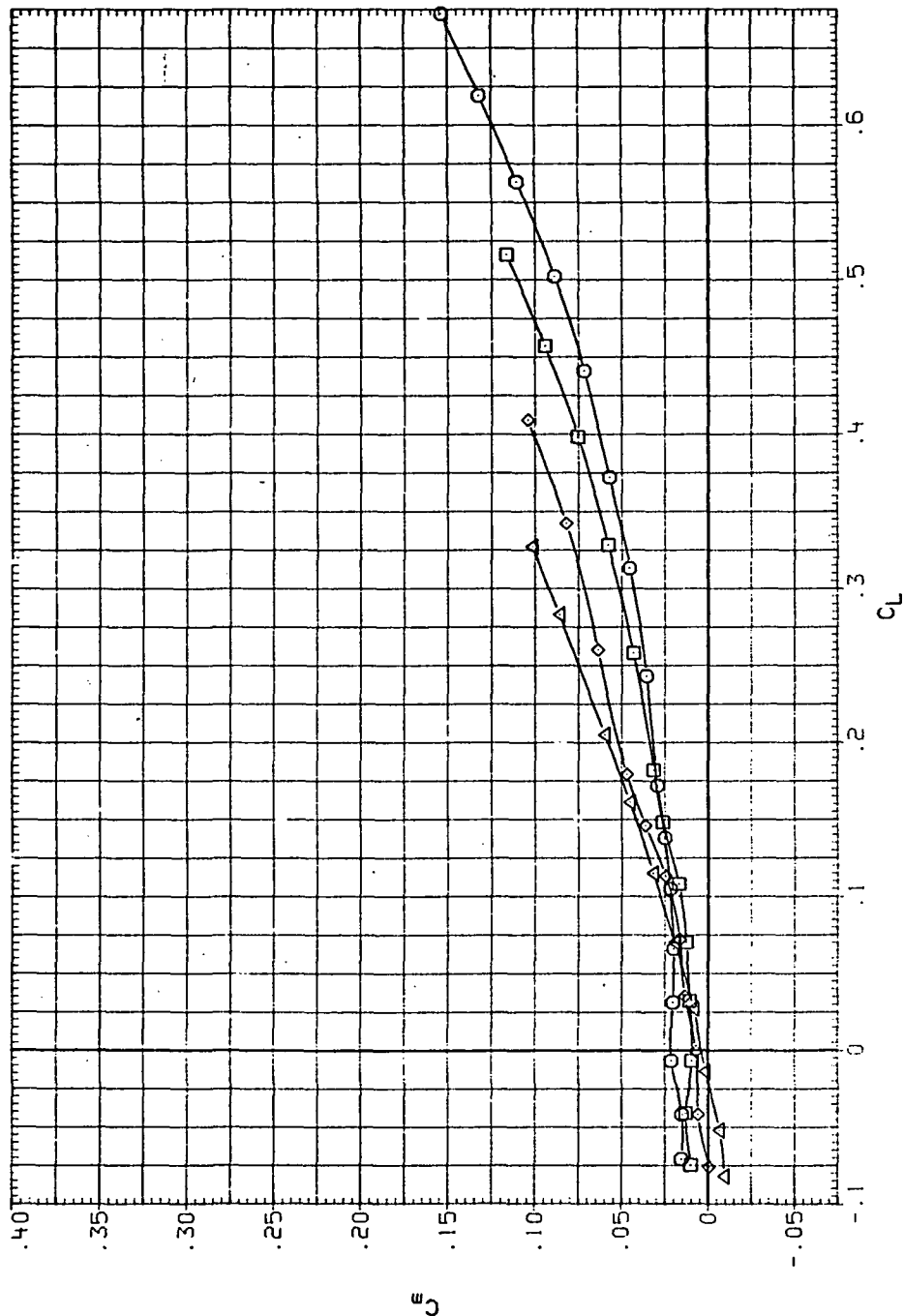


(b) C_D vs C_L .

Figure 43.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR046
 RJR086
 RJR126
 RJR165

RN/L Q(NSH)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

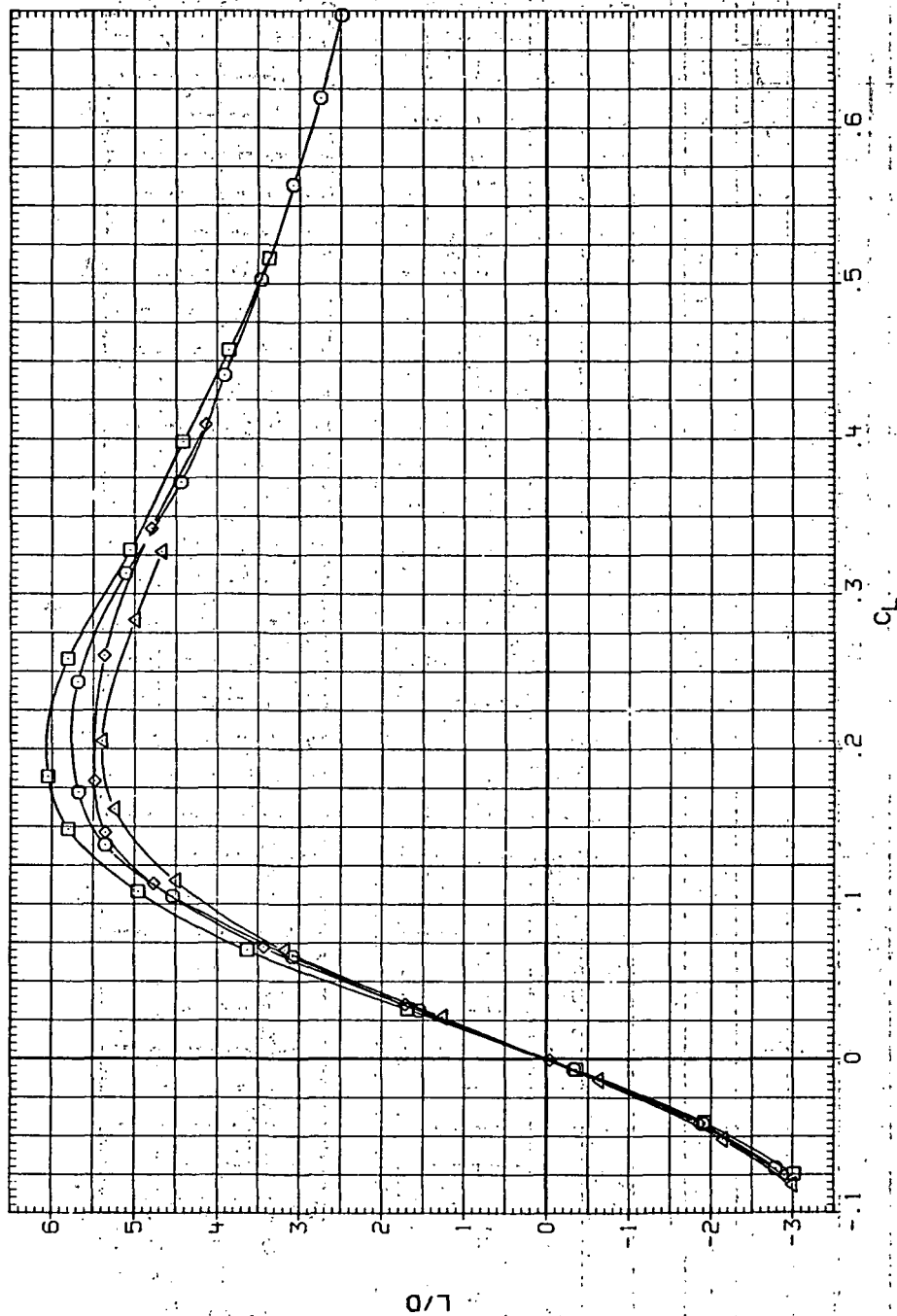


(c) C_m vs C_L .

Figure 43.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR06 9M608 (AL)
 RJR08 9M608 (AL)
 RJR126 9M608 (AL)
 RJR165 9M608 (AL)

RV/L Q(NSM)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

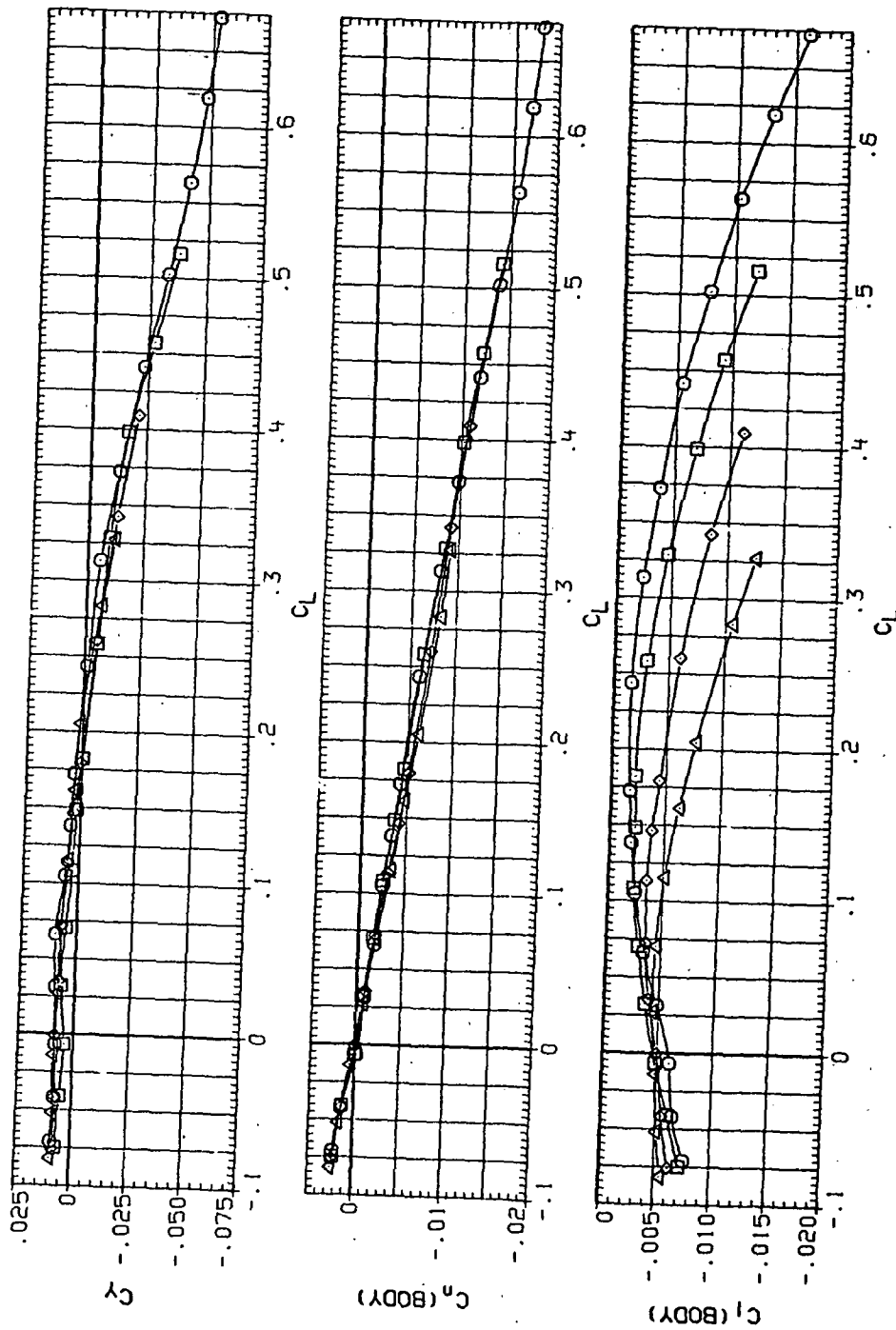


(d) L/D vs C_L .

Figure 43.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR046 SH608 (AL)
 RJR086 SH608 (AL)
 RJR126 SH608 (AL)
 RJR165 SH608 (AL)

RN/L Q(IN5M)
 3.280 9.450
 4.590 13.500
 6.230 18.500
 8.200 24.700

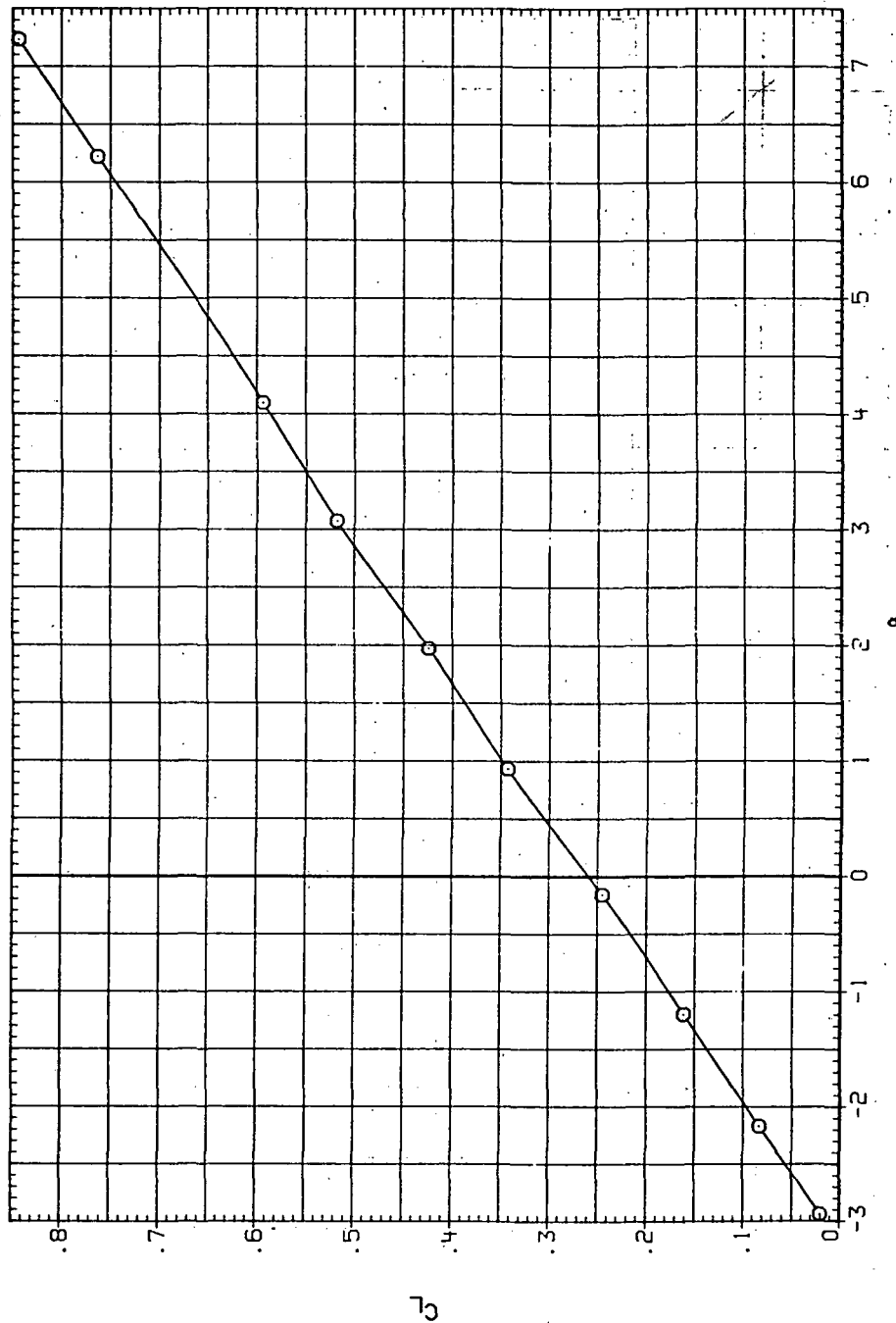


(e) C_Y , C_n and C_l vs C_L .

Figure 43.— Concluded.

DATA SET SYMBOL CONFIGURATION
RJR002 O 9H0B (AL)

RN/L Q(NSM)
6.230 7.480

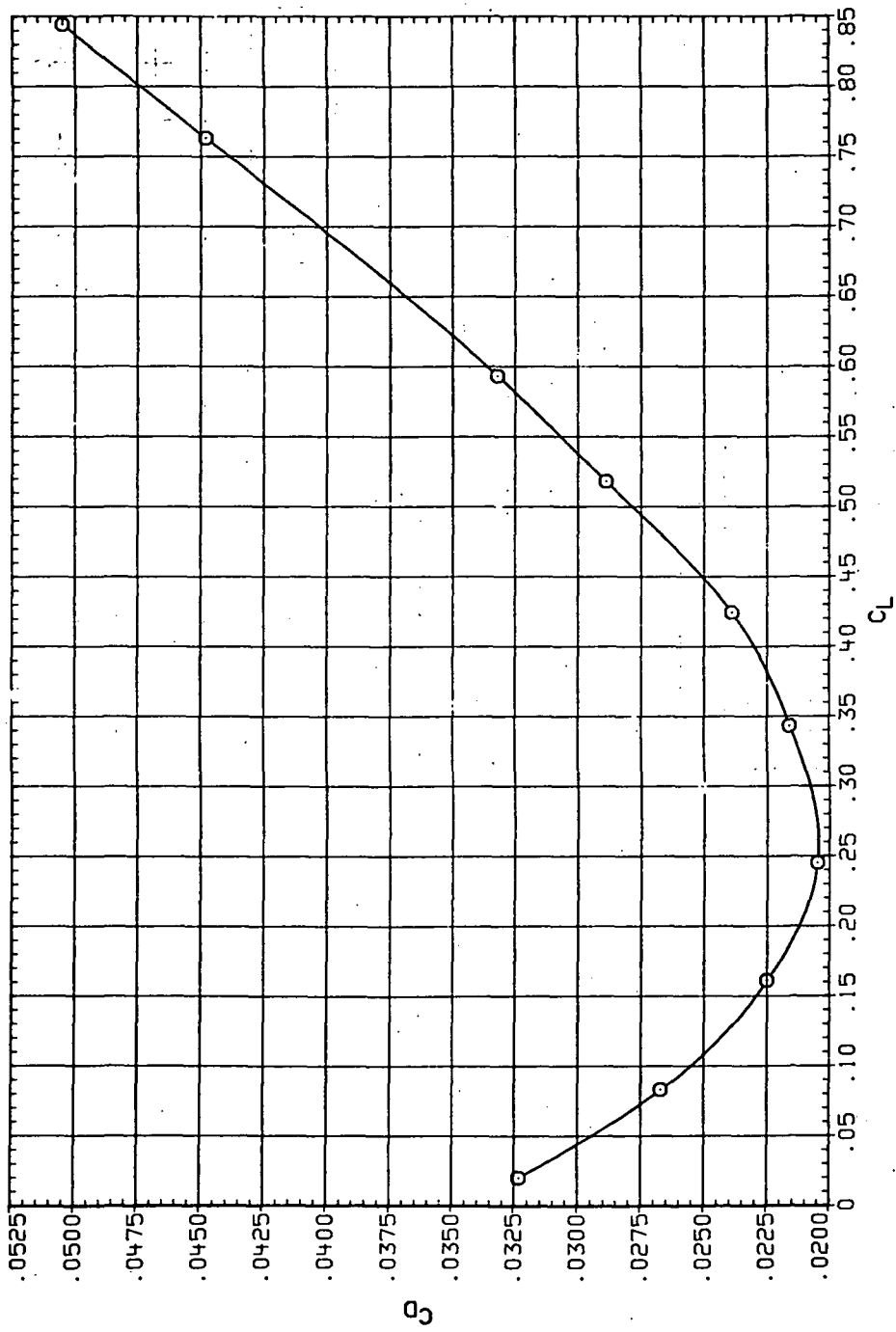


(a) C_L vs α .

Figure 44. -- Aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.4$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR002 O 9H0B (AL)

RN/L Q(NSM)
 6.230 7.480

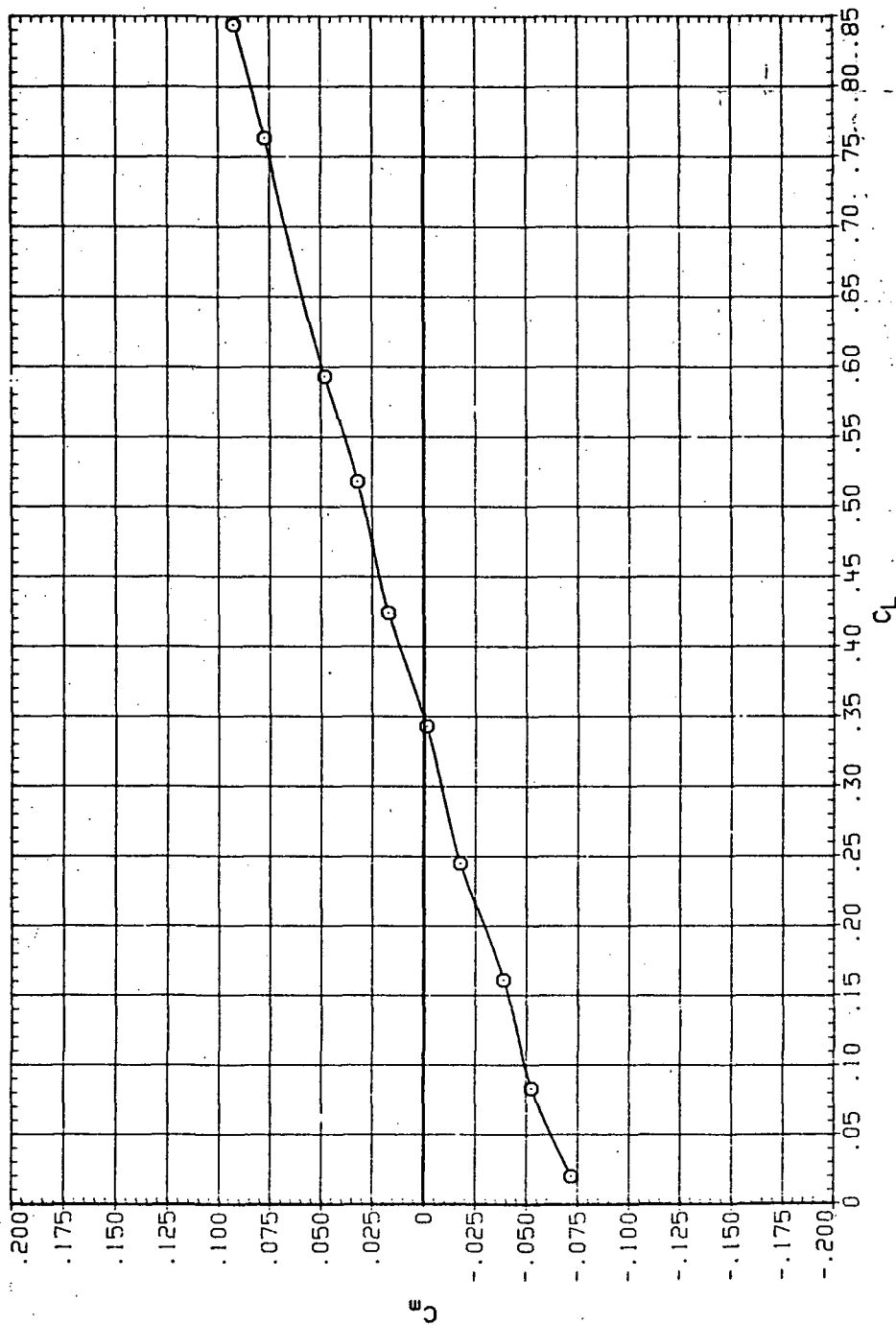


(b) C_D vs C_L .

Figure 44.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR002 O 940B (AL)

RM/L Q(NSM)
6.230 7.480

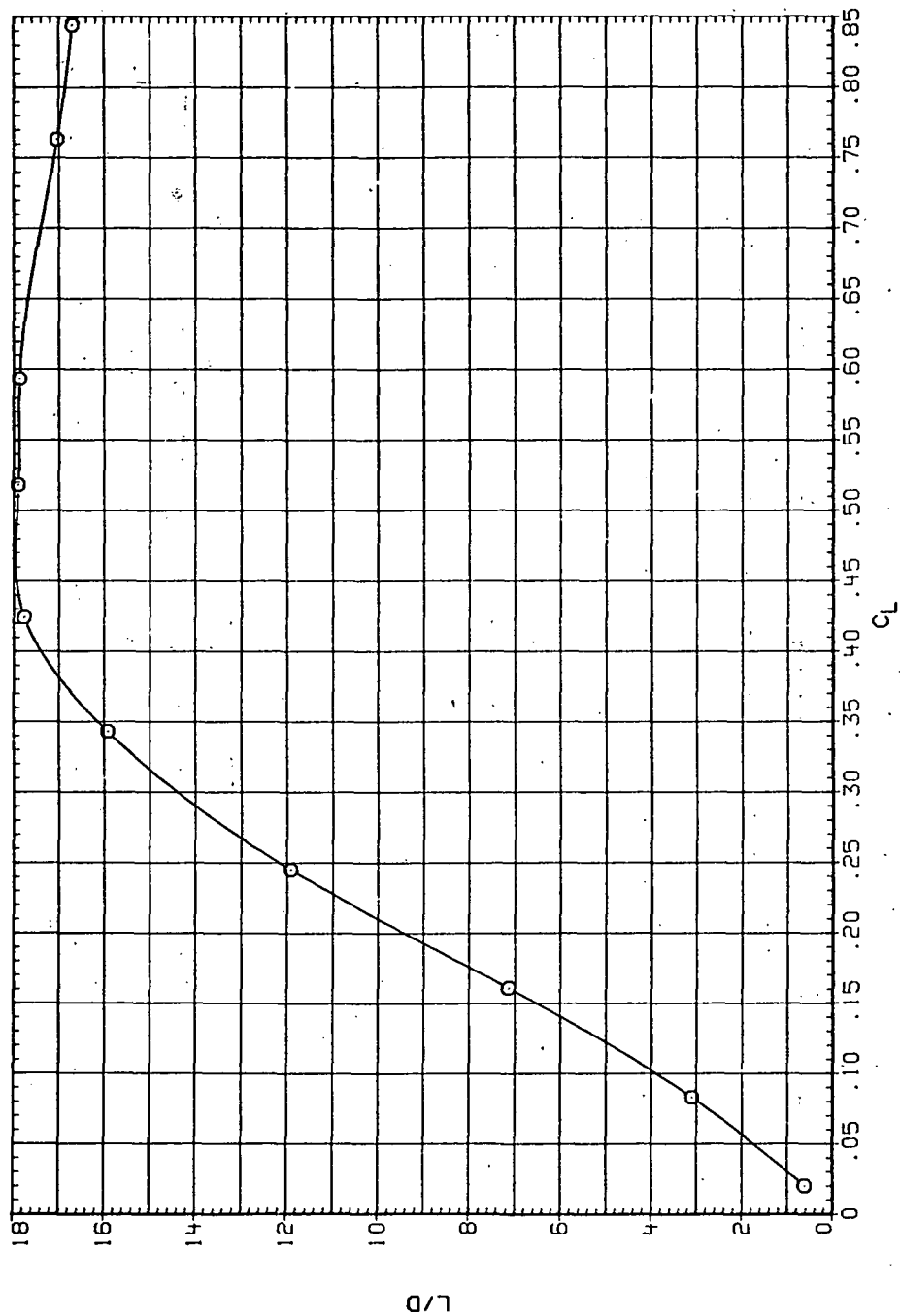


(c) C_m vs C_L .

Figure 44.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR002 O 9H0B (AL)

RN/L Q (INSH)
6.230 7.490

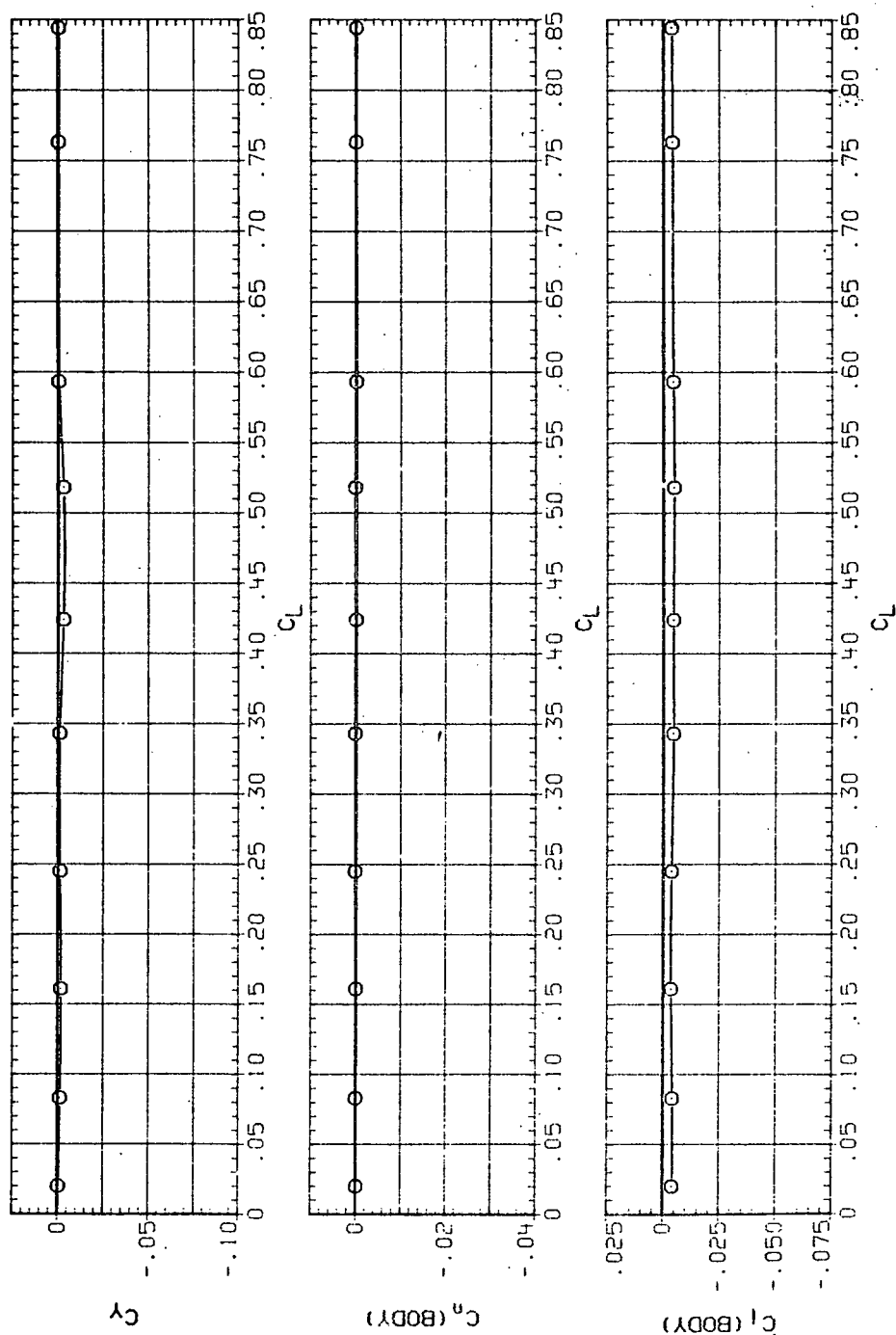


(d) L/D vs C_L .

Figure 44.— Continued.

DATA SET SYMBOL CONFIGURATION
RJRC02 O 9H09 (AL)

RN/L Q(NSM)
6.230 7.480

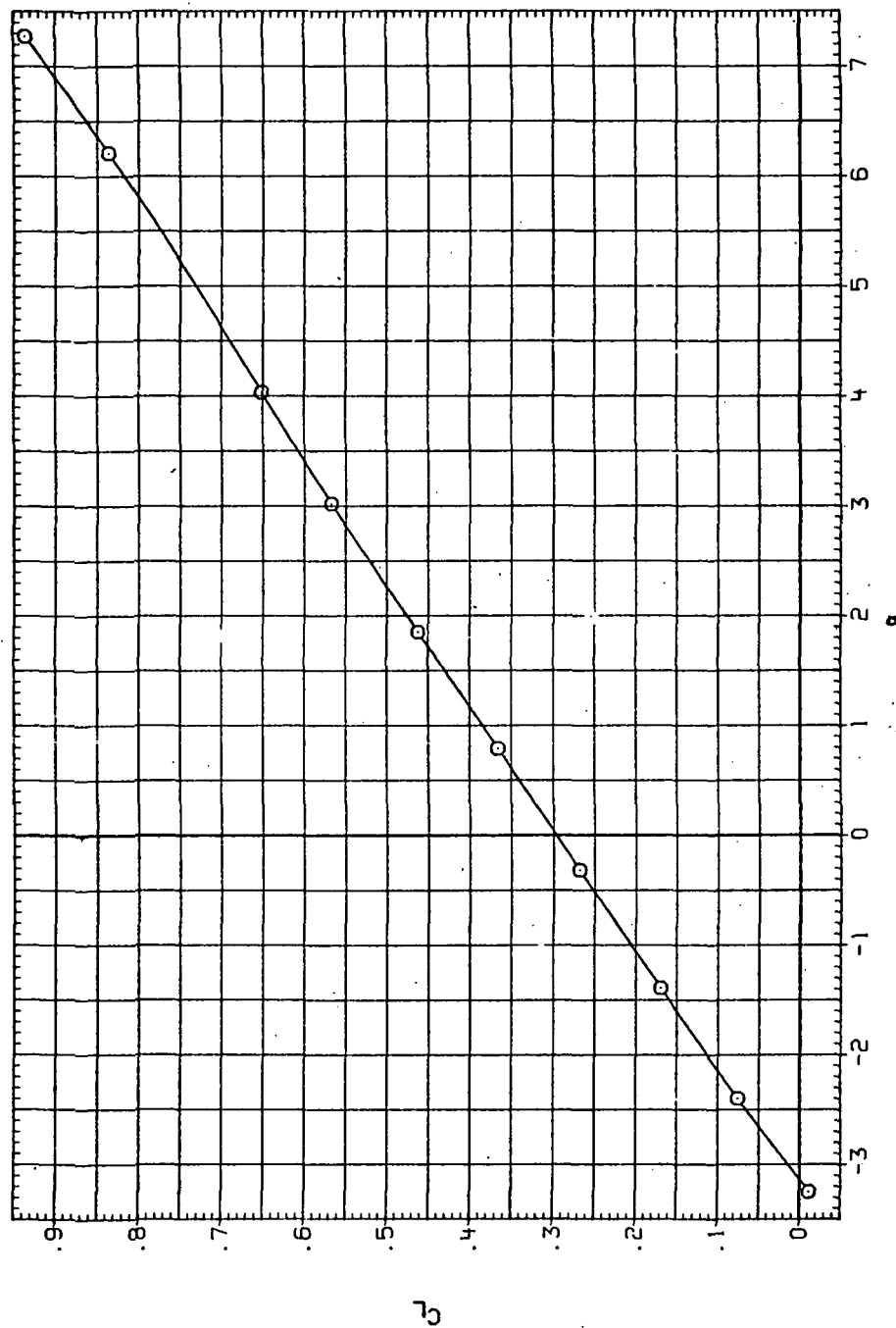


(e) C_Y , C_n and C_l vs C_L .

Figure 44.— Concluded.

DATA SET SYMBOL CONFIGURATION
RJR003 O 9409 (AL)

RN/L Q(NSH)
6.230 10.500

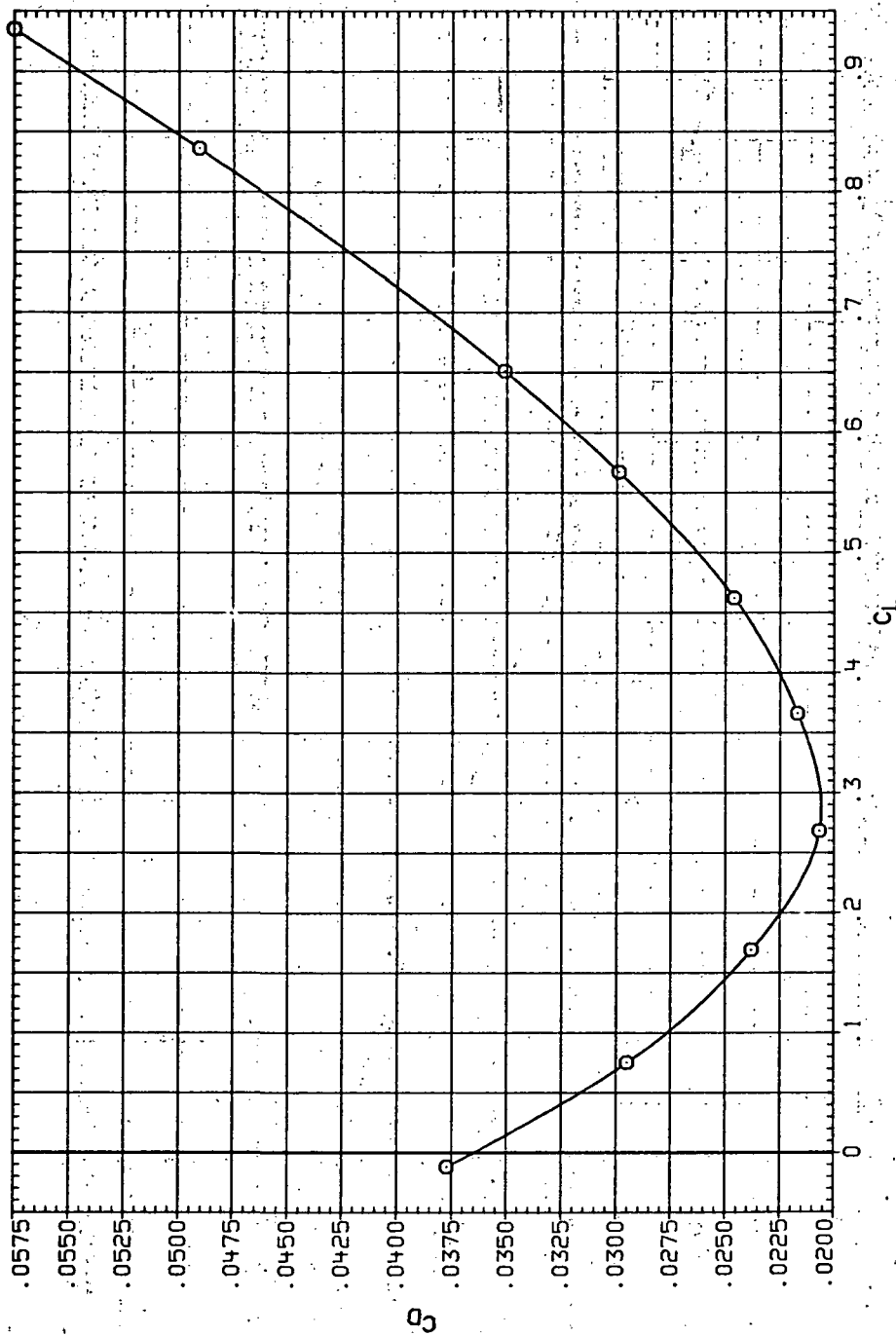


(a) C_L vs α .

Figure 45.— Aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.6$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
RJR003 O 9A0B (AL)

RN/L Q(NSH)
6.230 10.600

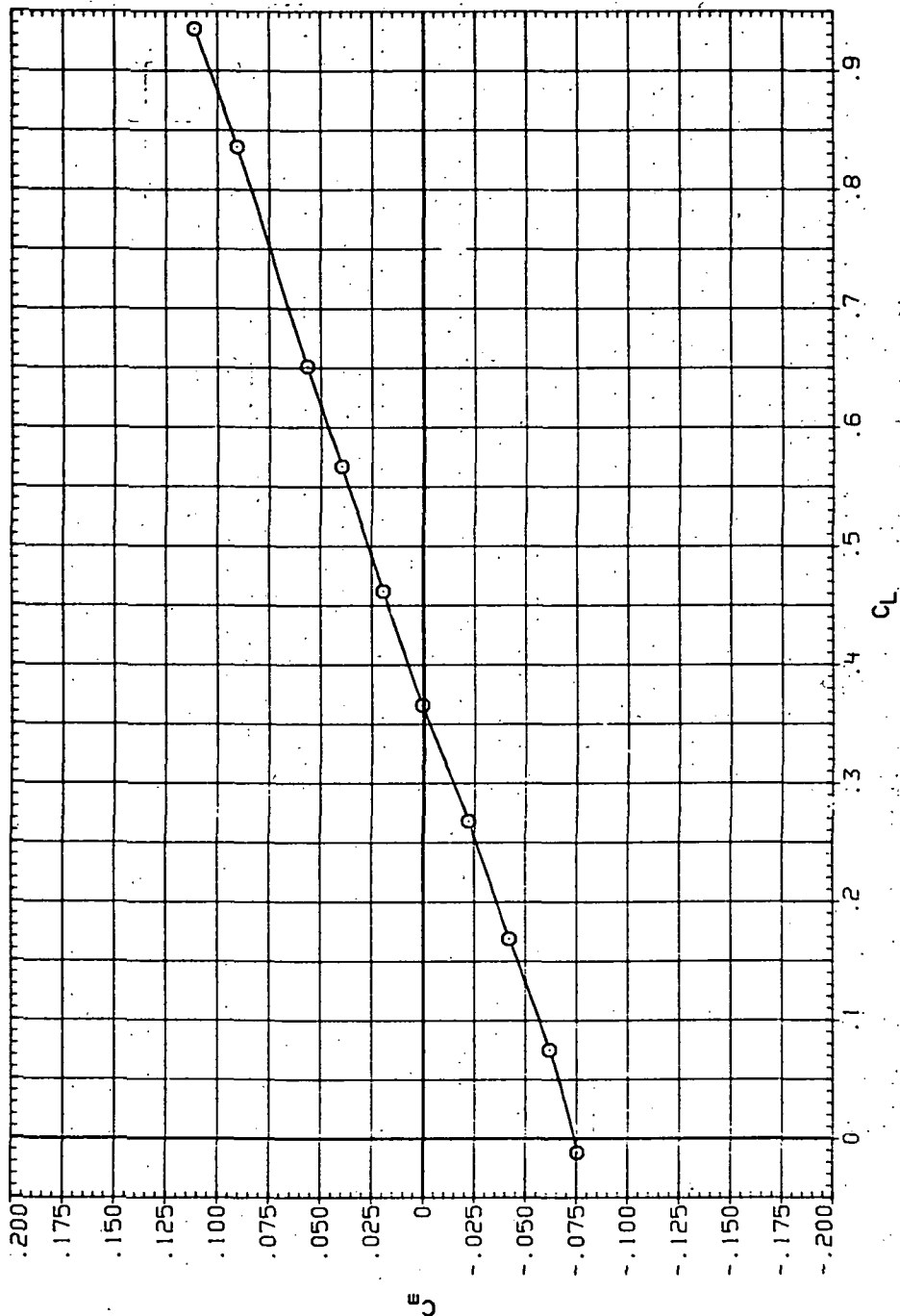


(b) C_D vs C_L .

Figure 45. - Continued.

DATA SET SYMBOL CONFIGURATION
RJR003 O SHOB (AL)

RN/L Q(NSM)
5.230 10.600

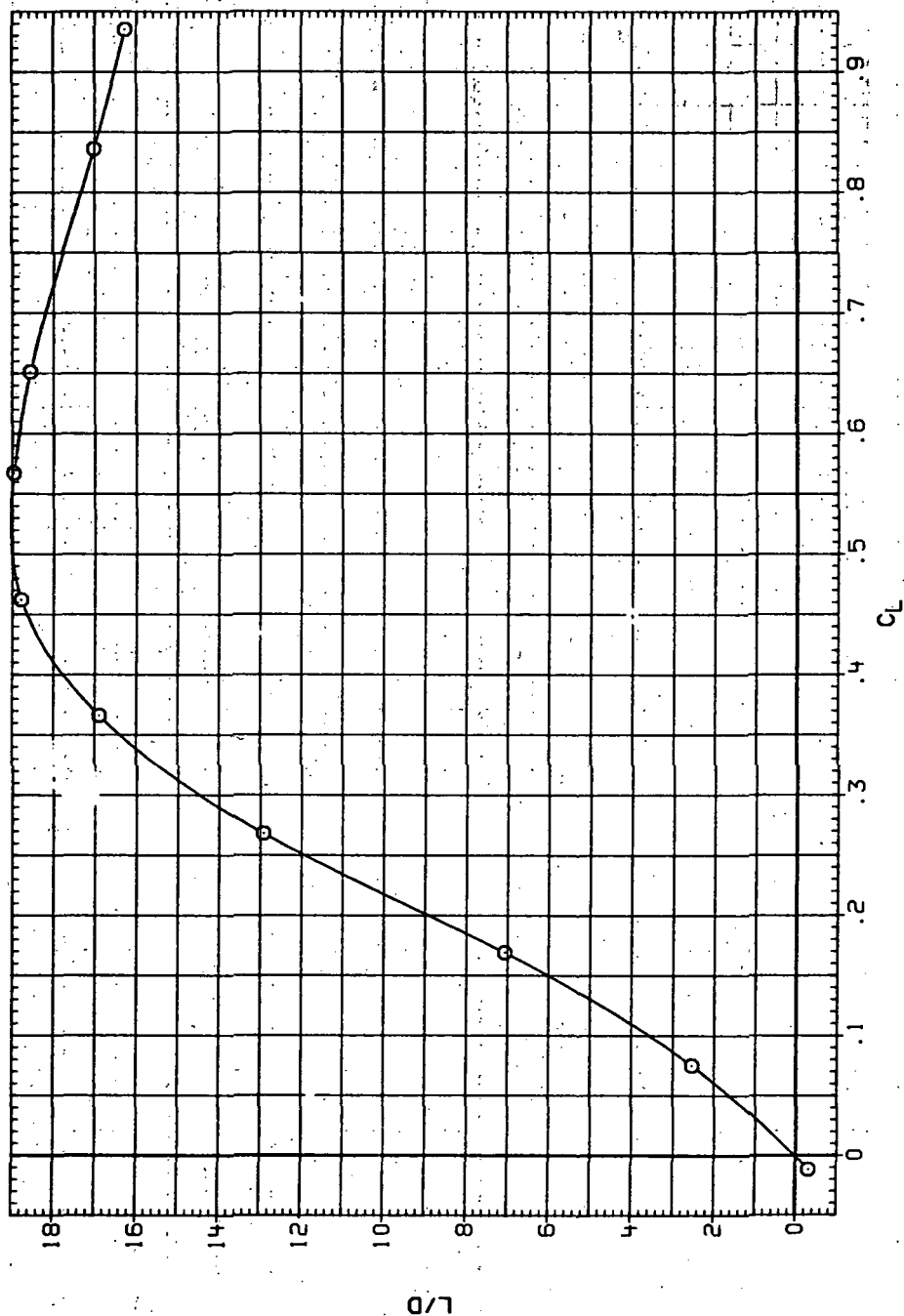


(c) C_m vs C_L .

Figure 45.— Continued.

DATA SET SYMBOL CONFIGURATION
RUR003 O SHOB (AL)

RM/L Q(NSH)
6.230 10.500

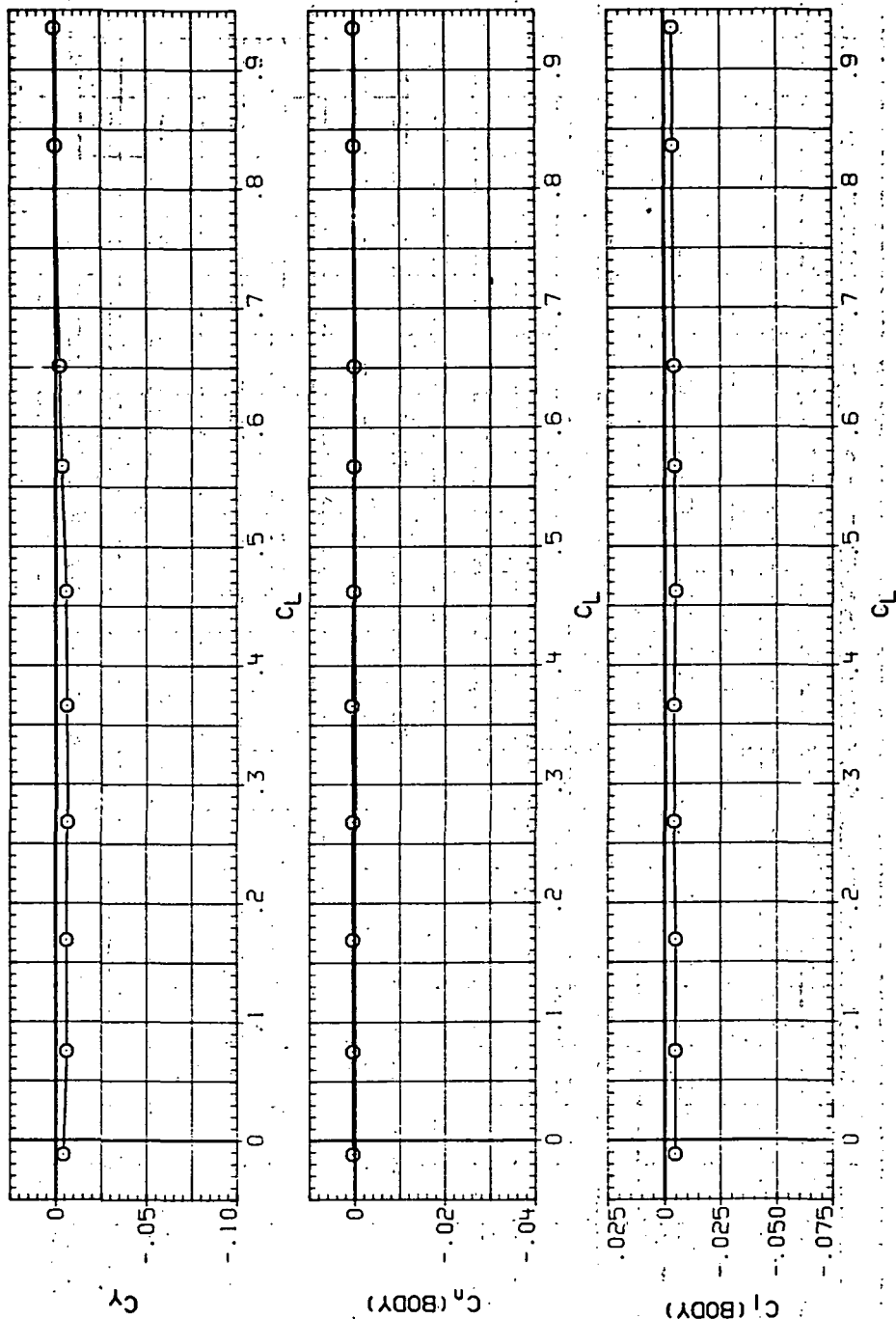


(d) L/D vs C_L .

Figure 45.— Continued.

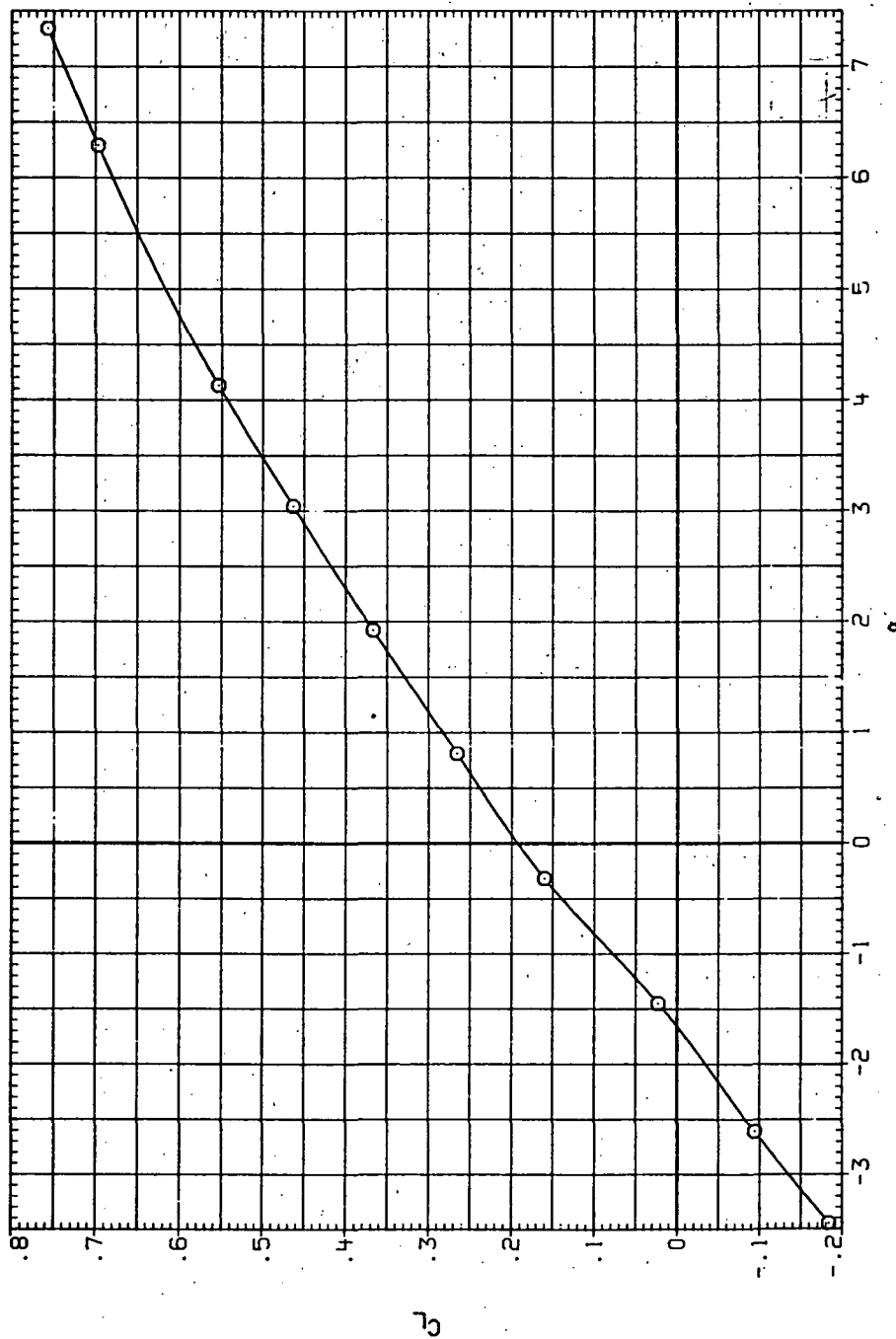
DATA SET SYMBOL CONFIGURATION
RJR003 O 940B (AL)

RN/L 0(NSM)
6.230 10.600



(e) C_y , C_n and C_l vs C_L .

Figure 45.— Concluded.

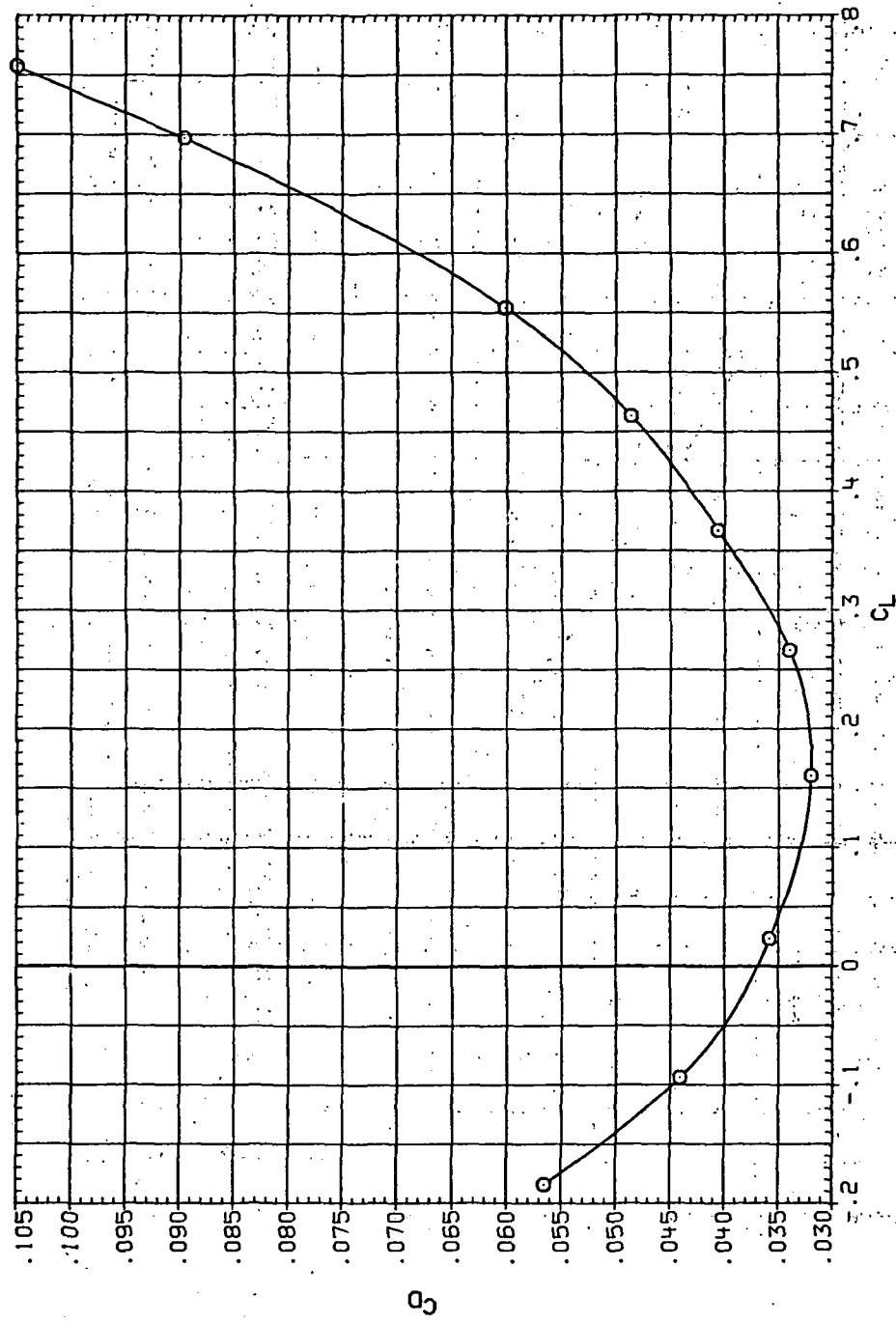


(a) C_L vs α .

Figure 46.— Aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.8$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
RJR004 O 9408 (AL)

RM/L 0 (NSH)
6.230 13.400

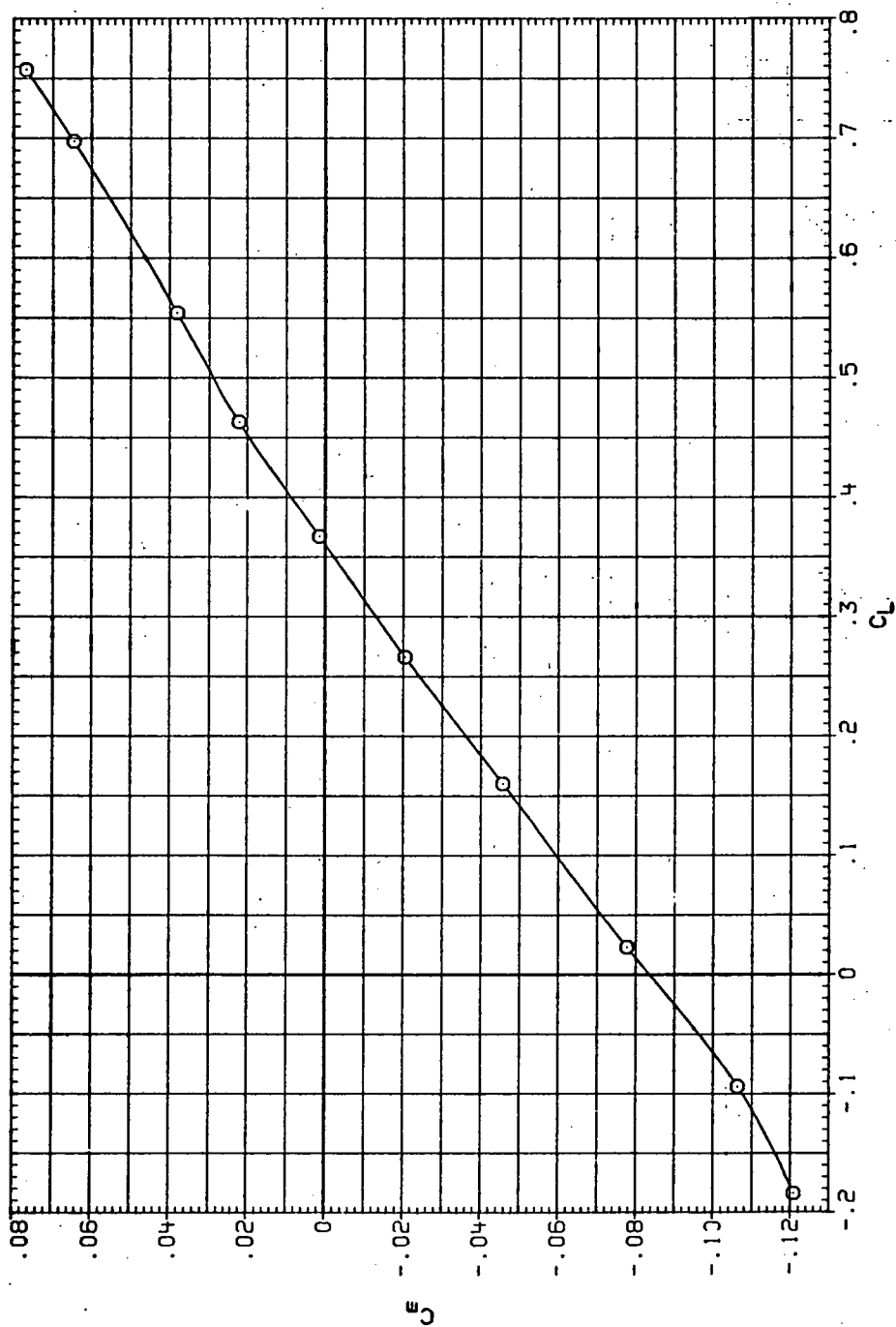


(b) C_D vs C_L .

Figure 46.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR004 O 9408 (AL)

RN/L Q(NSM)
6.230 13.400

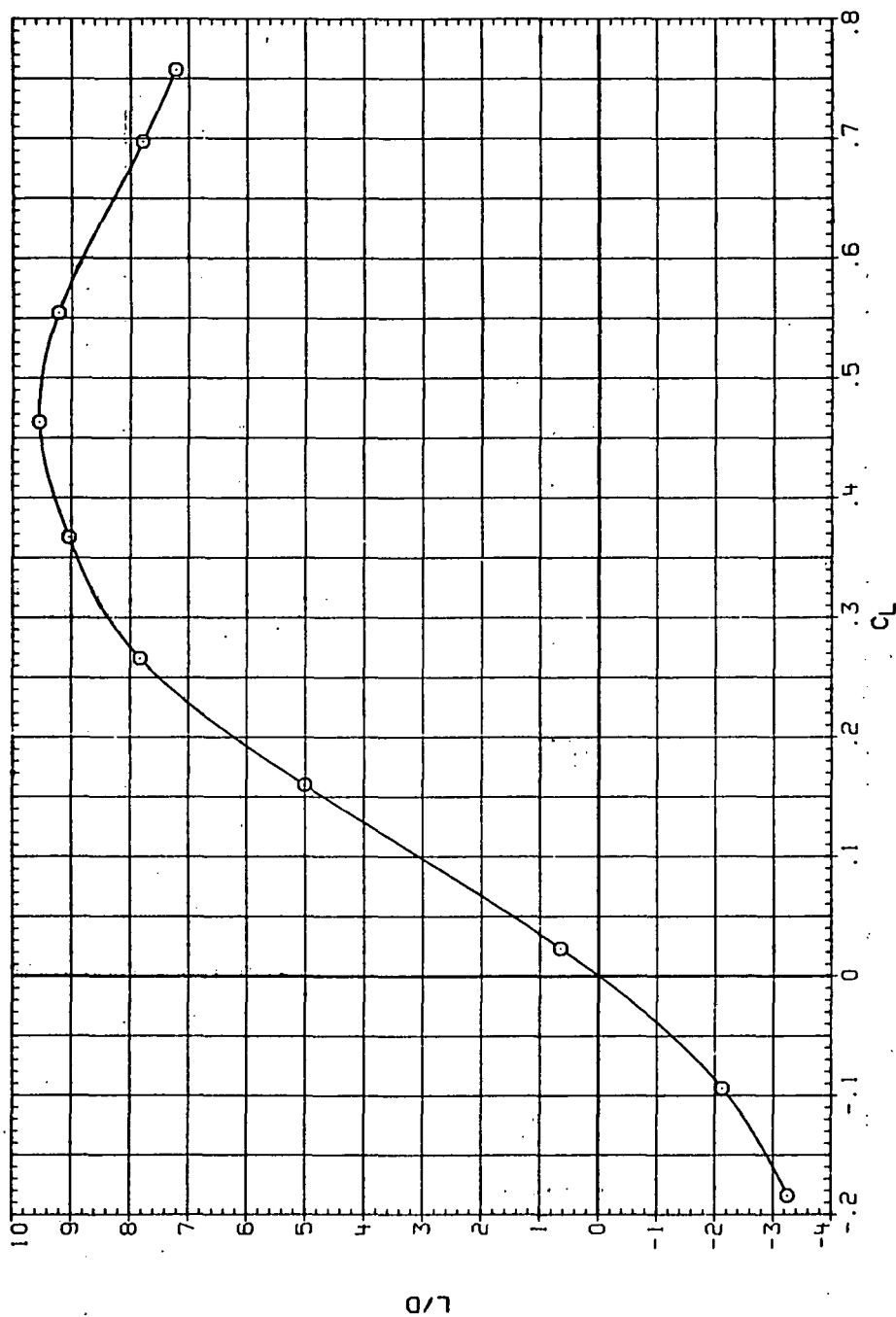


(c) C_m vs C_L

Figure 46.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR0004 O SHOB (AL)

RN/L G(NSM)
6.230 13.400

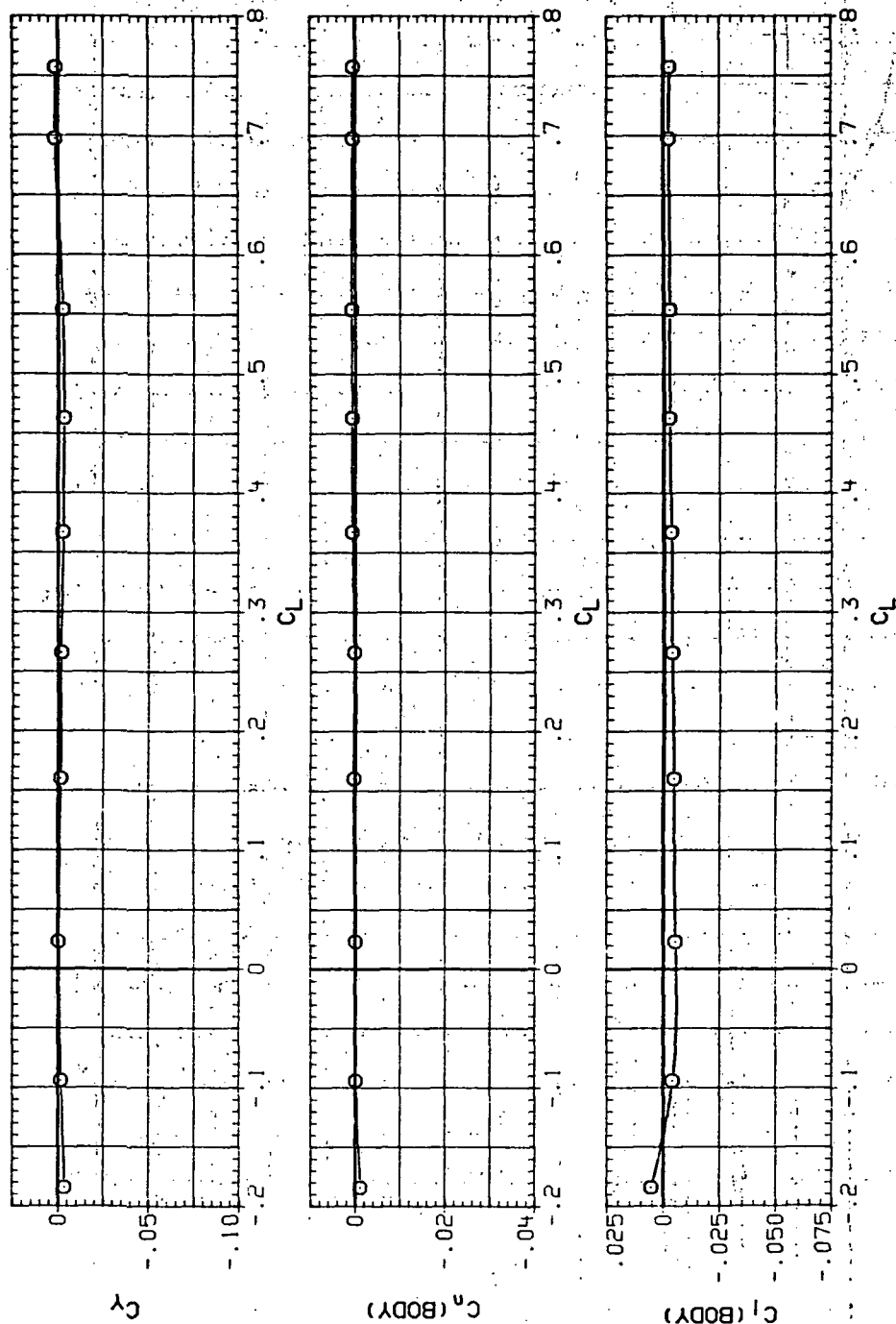


(d) L/D vs C_L .

Figure 46.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR004 O 9408 (AL)

RN/L QINSHI
6.230 13.400

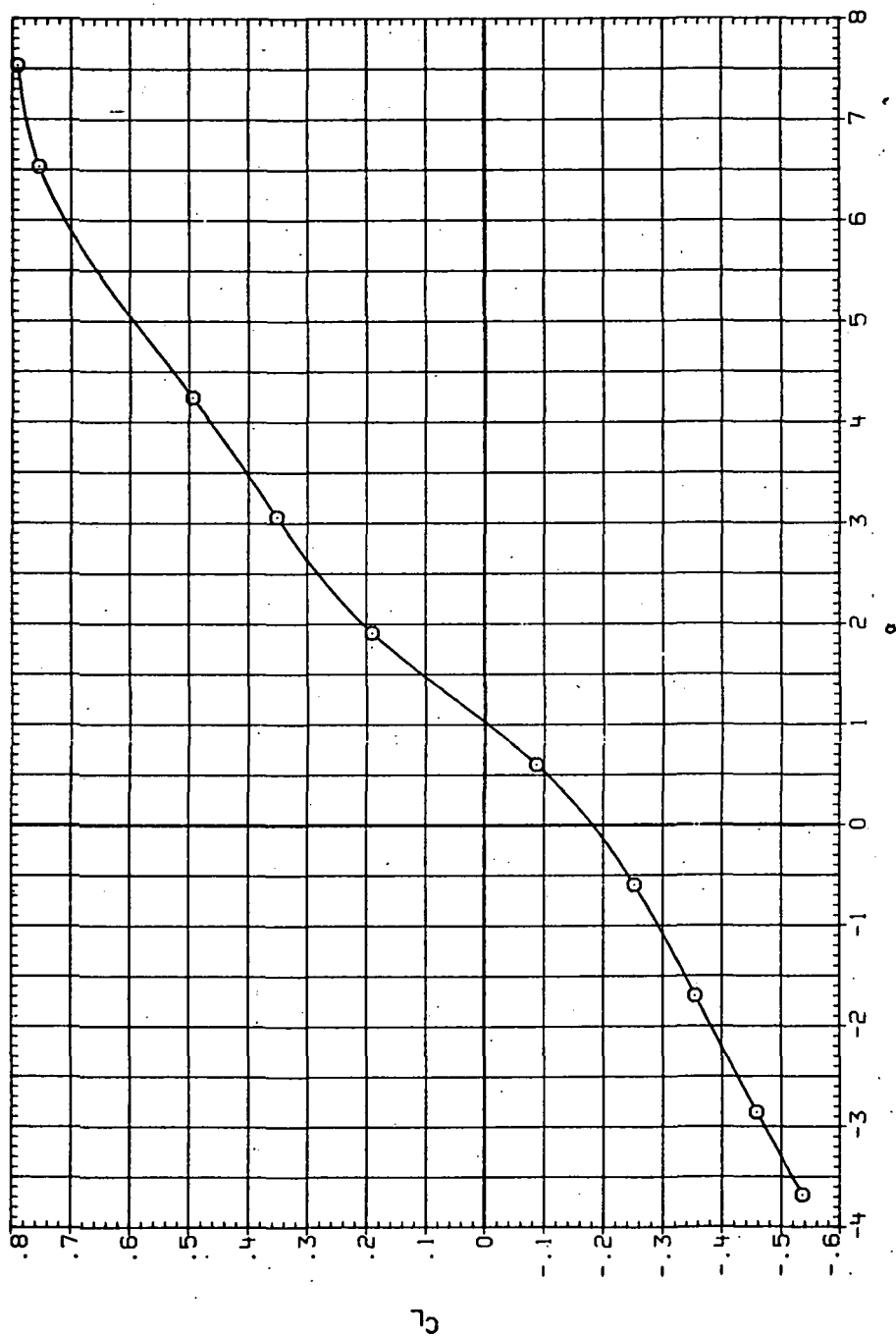


(e) C_Y , C_n and C_l vs C_L .

Figure 46. — Concluded.

DATA SET SYMBOL CONFIGURATION
RUR005 O 9408 (AL)

RN/L C: NSH
6.230 14.500

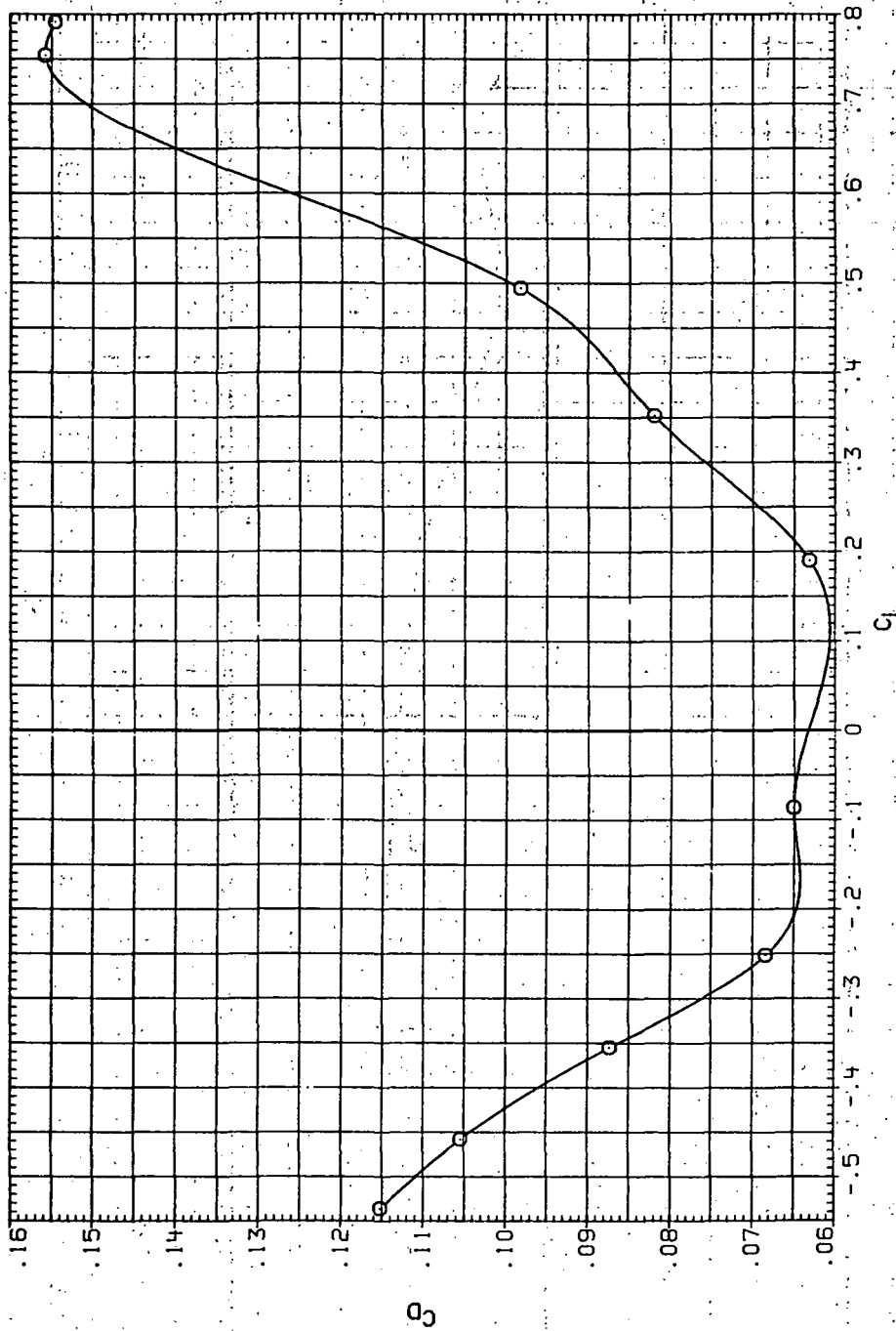


(a) C_L vs α .

Figure 47.— Aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.9$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
RJR005 O 9408 (AL)

RM/L Q(NSM)
6.230 14.500

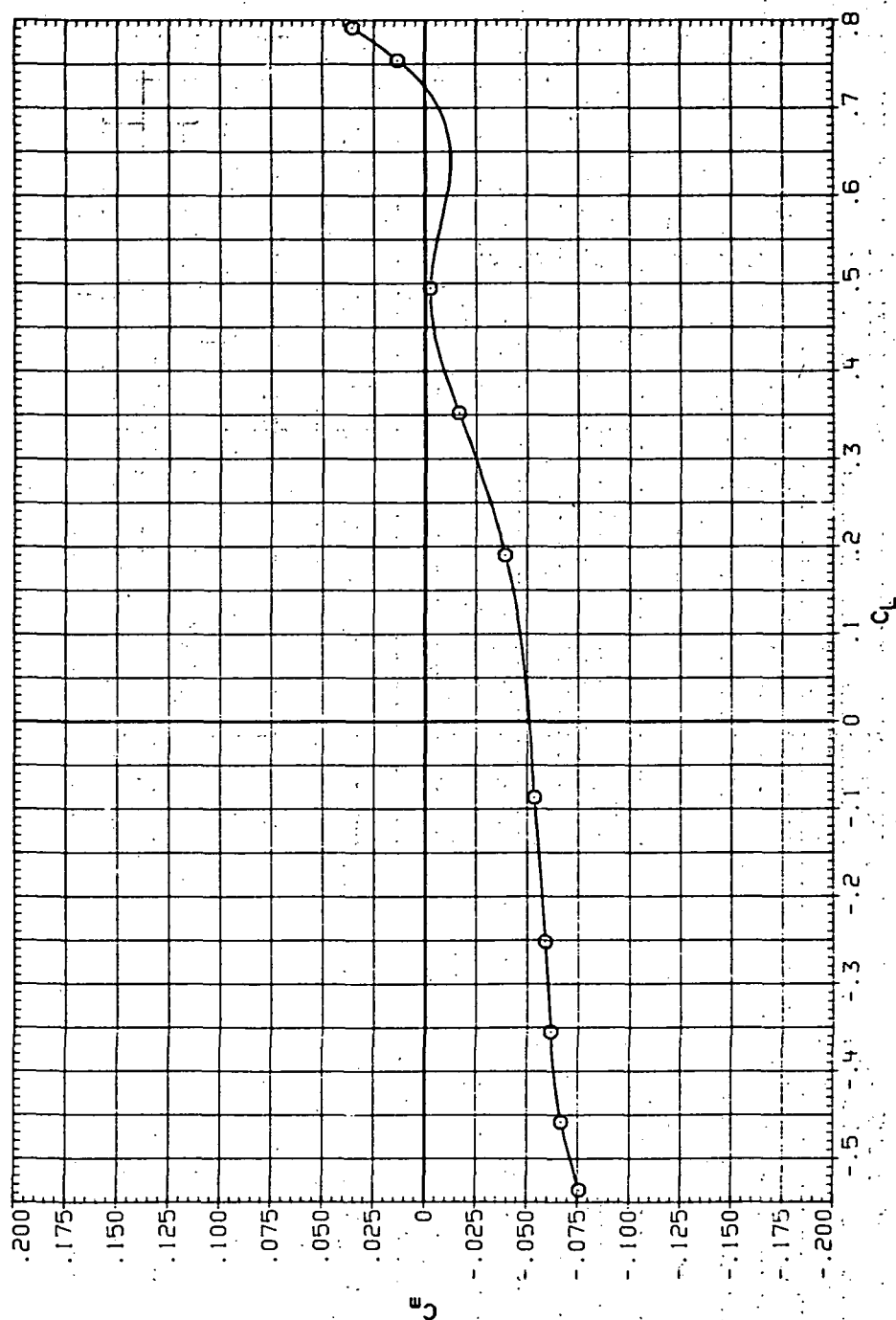


(b) C_D vs C_L .

Figure 47.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR005 O 940B (AL)

RN/L Q(NSM)
6.230 14.500

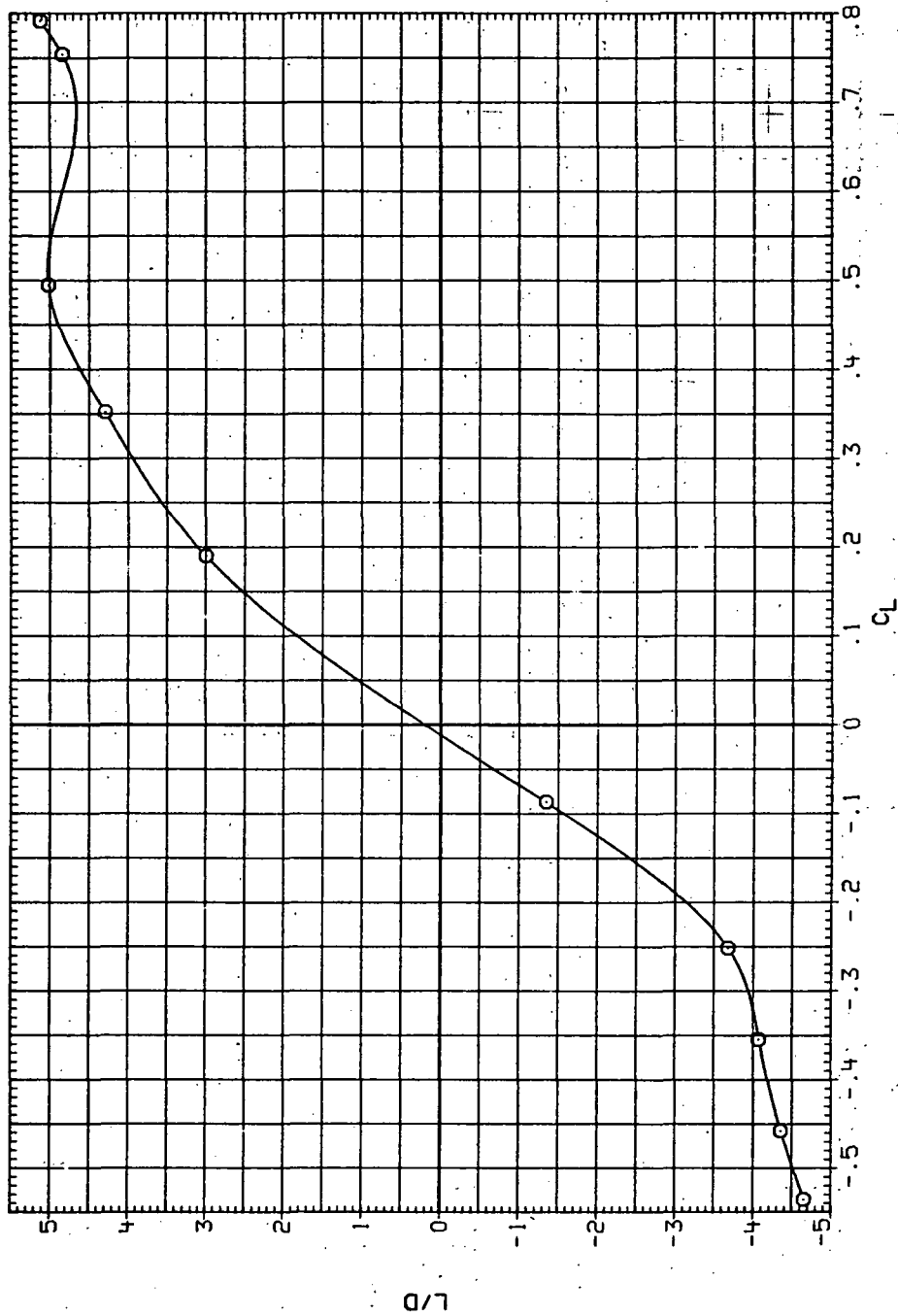


(c) C_m vs C_L .

Figure 47.— Continued.

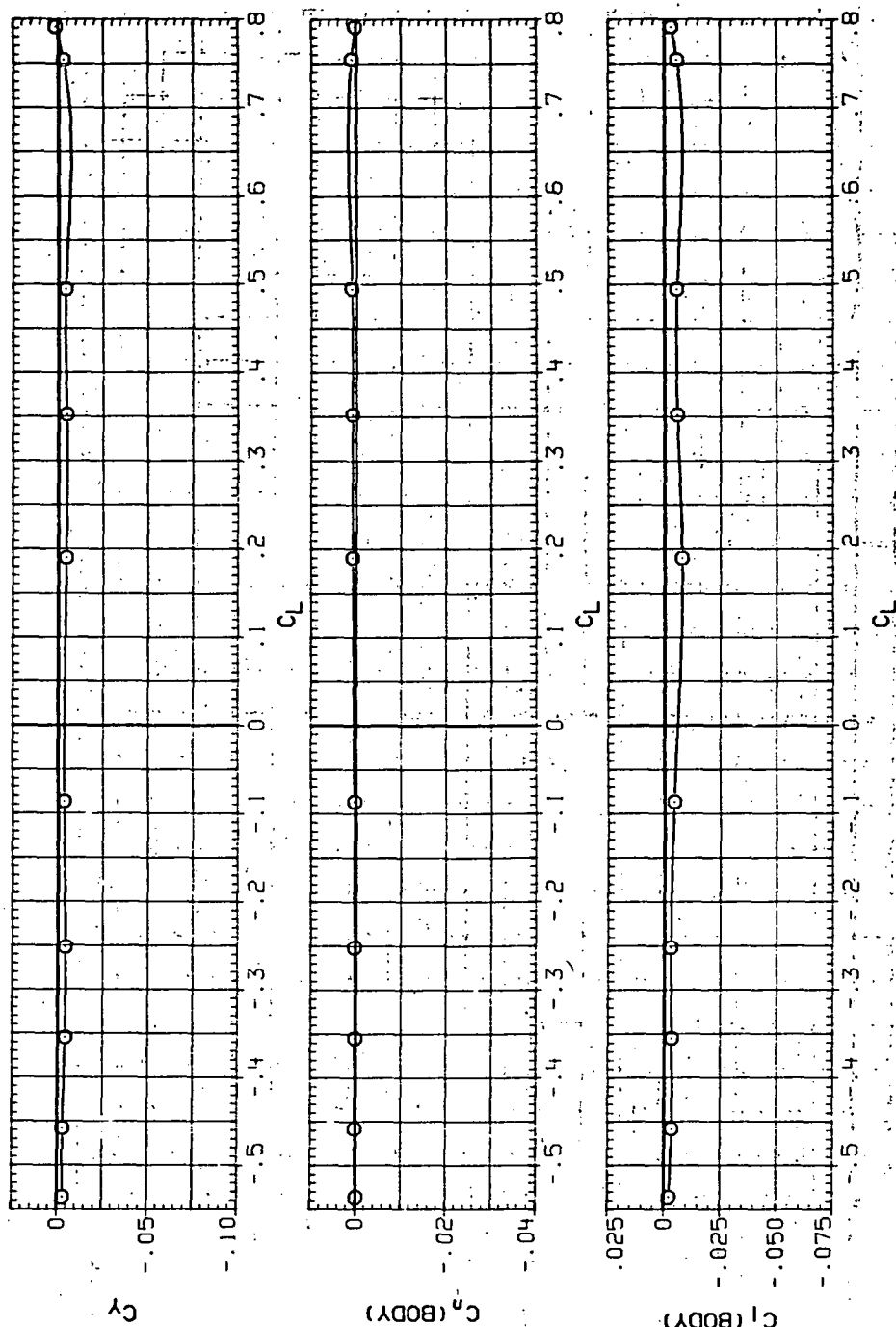
DATA SET SYMBOL CONFIGURATION
RJR005 O 9A0B (AL)

RN/L Q(NSM)
6.230 14,500



(d) L/D vs C_L .

Figure 47.— Continued.

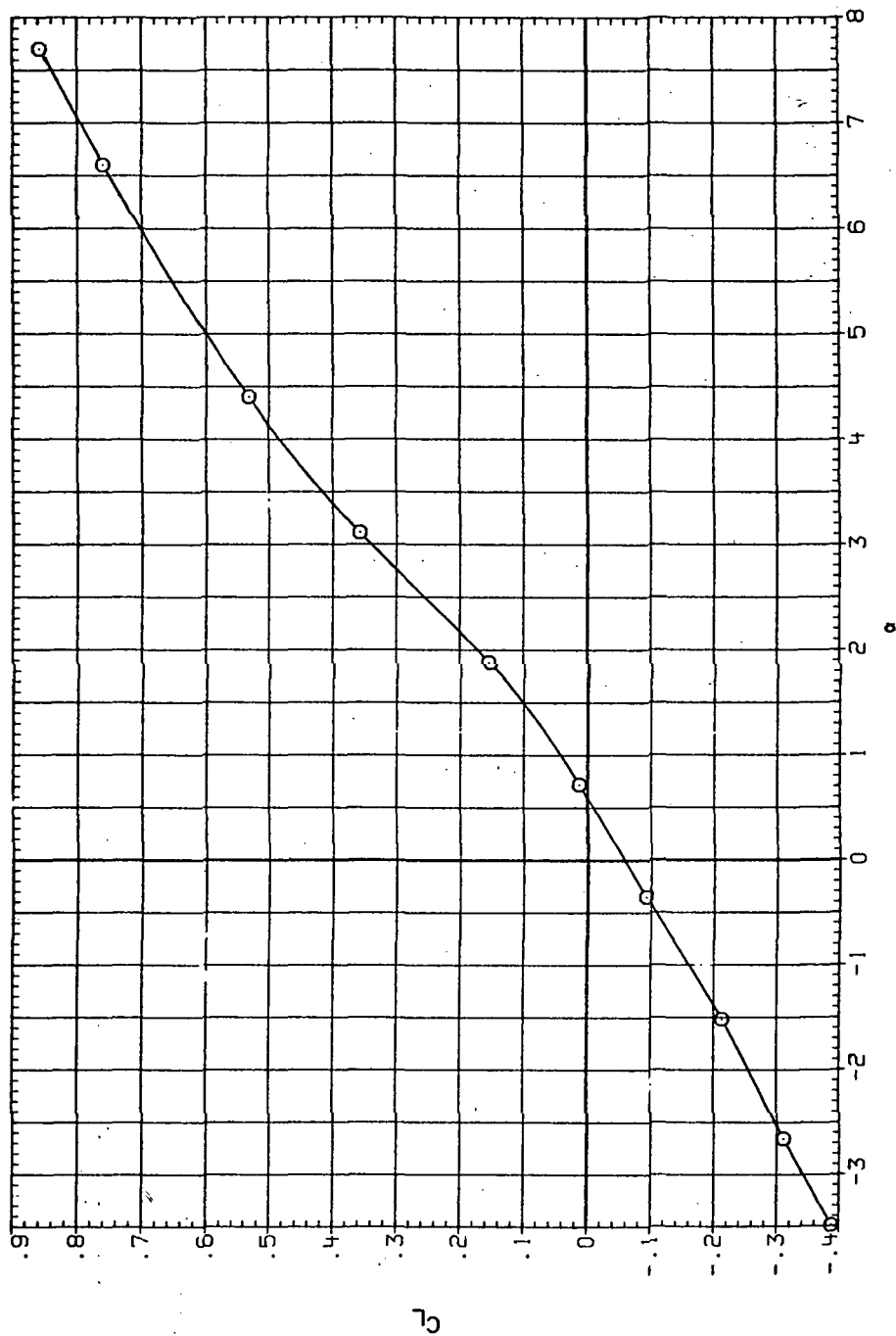


(e) C_Y , C_n and C_l vs C_L .

Figure 47.- Concluded.

DATA SET SYMBOL CONFIGURATION
RJR005 O SWOB 1AL

RN/L Q(NSM)
6.230 15.000

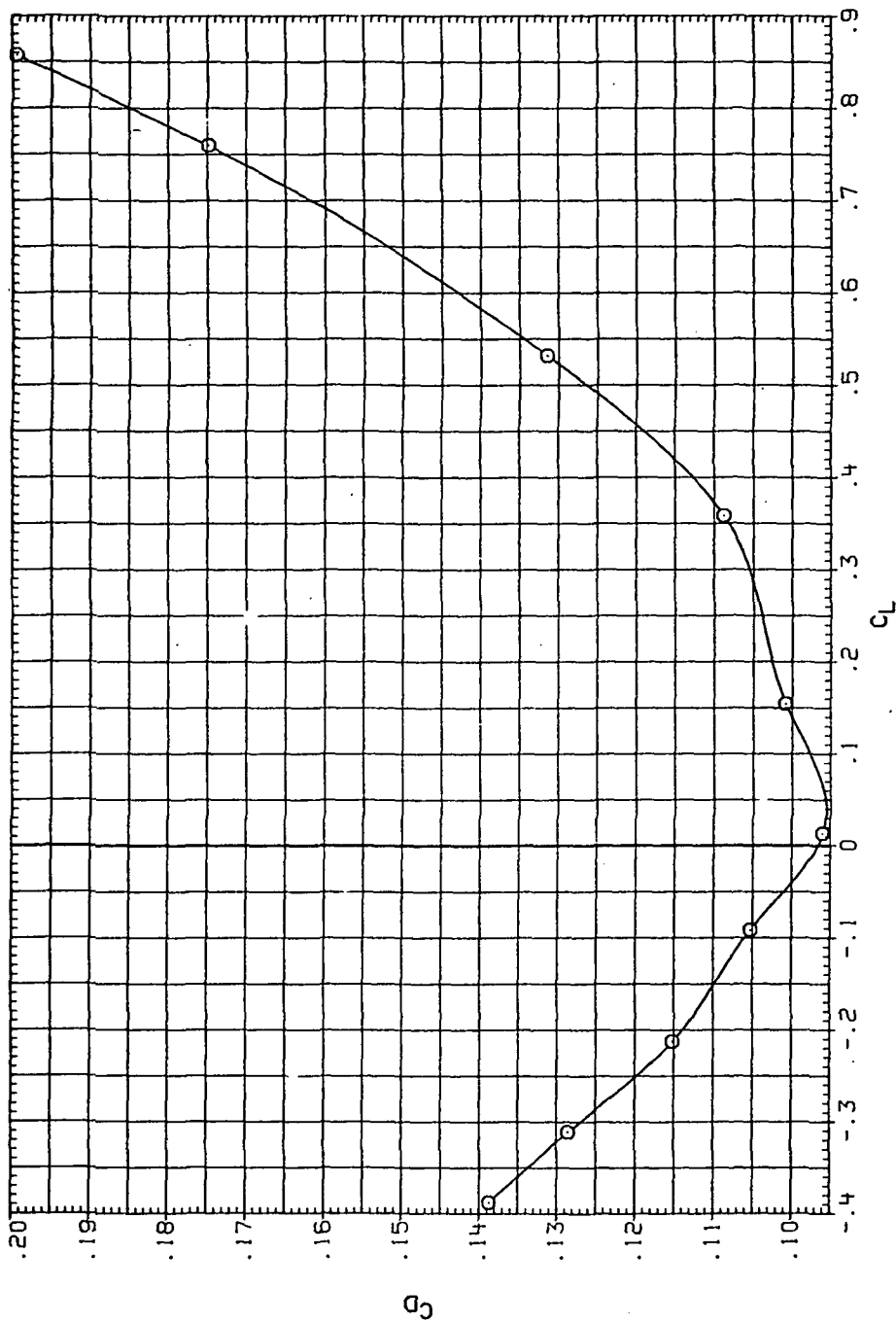


(a) C_L vs α .

Figure 48.— Aerodynamic characteristics of the aluminum trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.95$ and the modified NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
RJR005 O SHOB (AL)

RN/L Q(NSH)
6.230 15.000

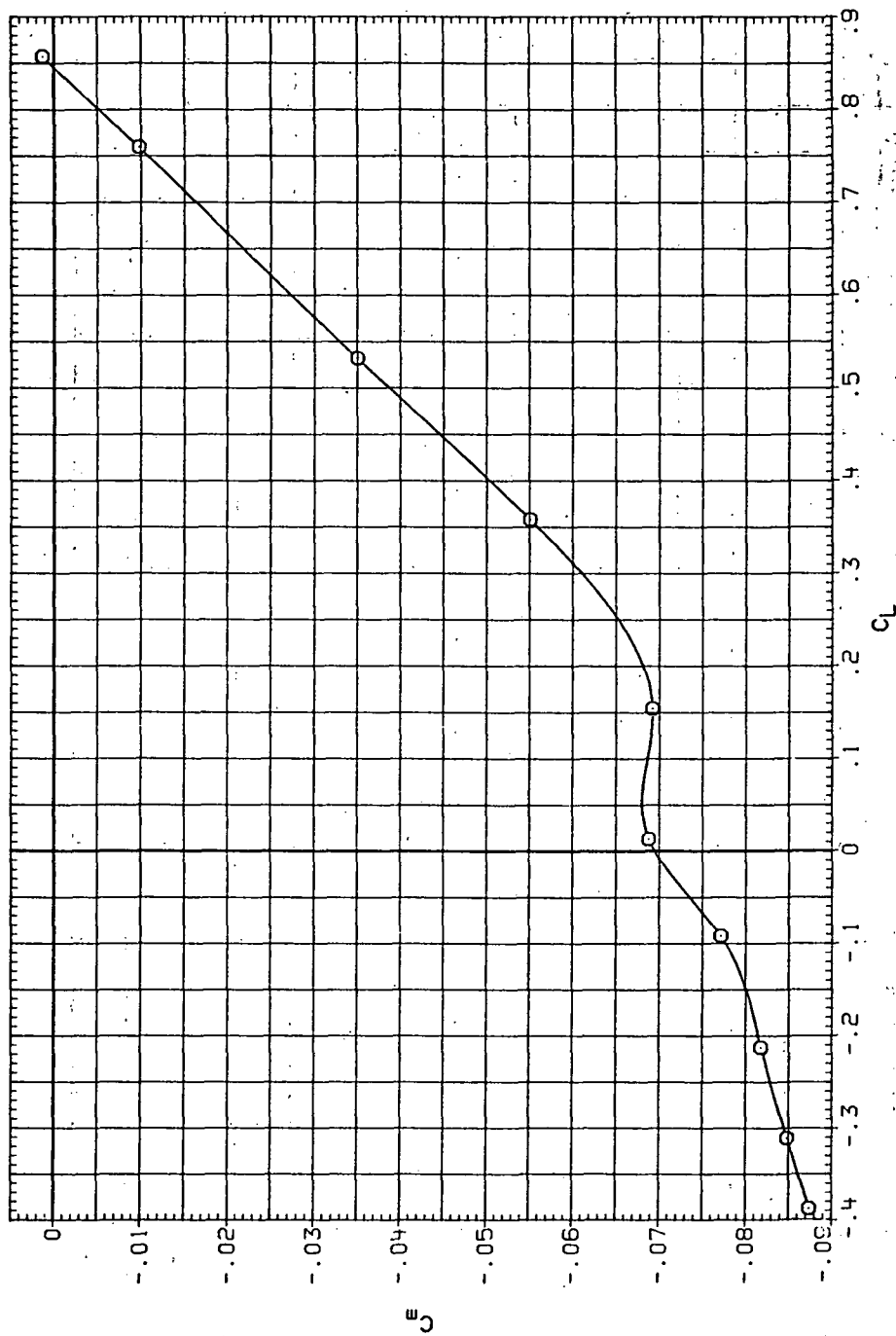


(b) C_D vs C_L .

Figure 48.— Continued.

DATA SET SYMBOL CONFIGURATION
RJR005 O 9408 (AL)

RN/L C(NSM)
6.230 15.000

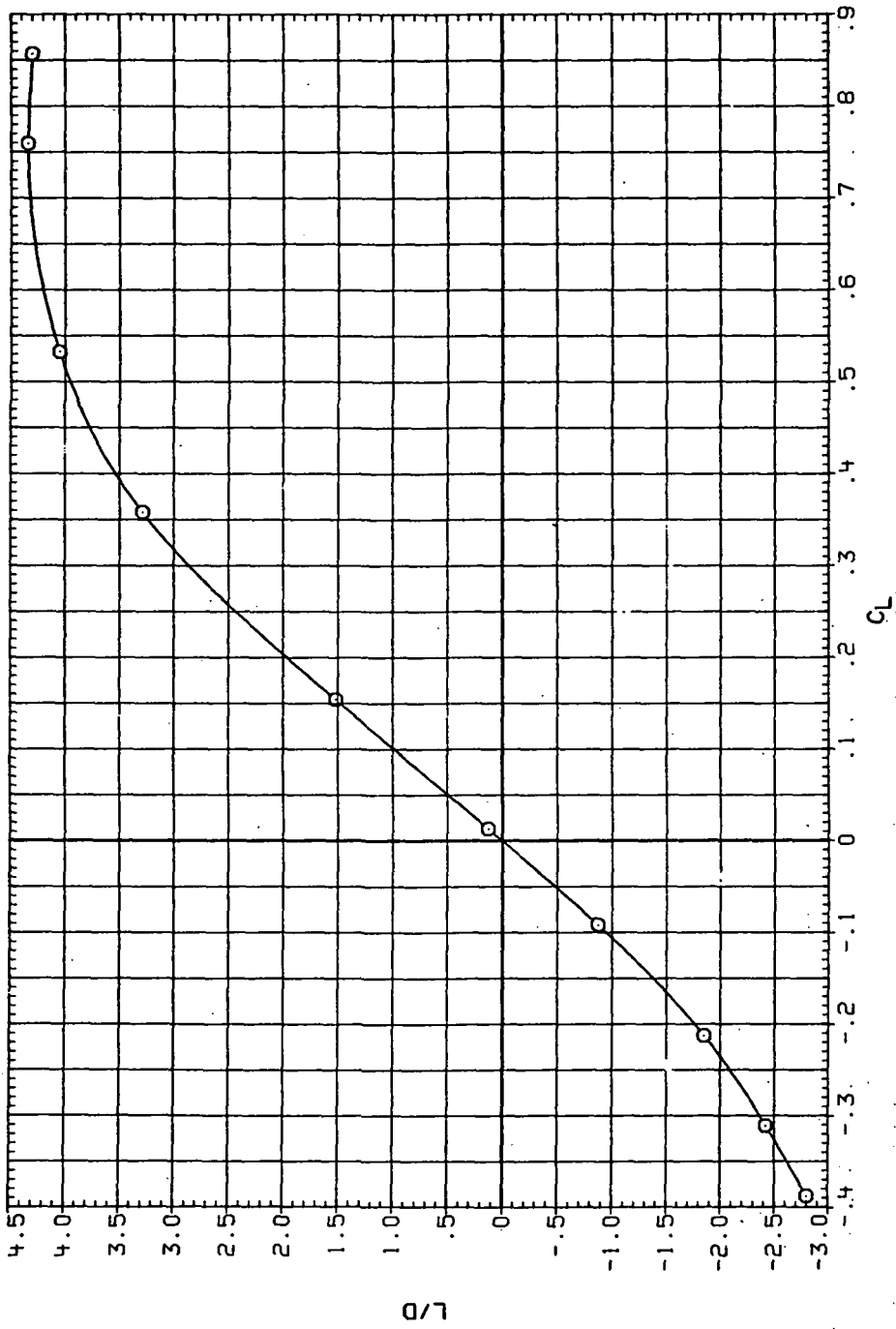


(c) C_m vs C_L .

Figure 48. — Continued.

DATA SET SYMBOL CONFIGURATION
RJR005 O 940B (AL)

RN/L Q(L,3M)
6.230 15.000

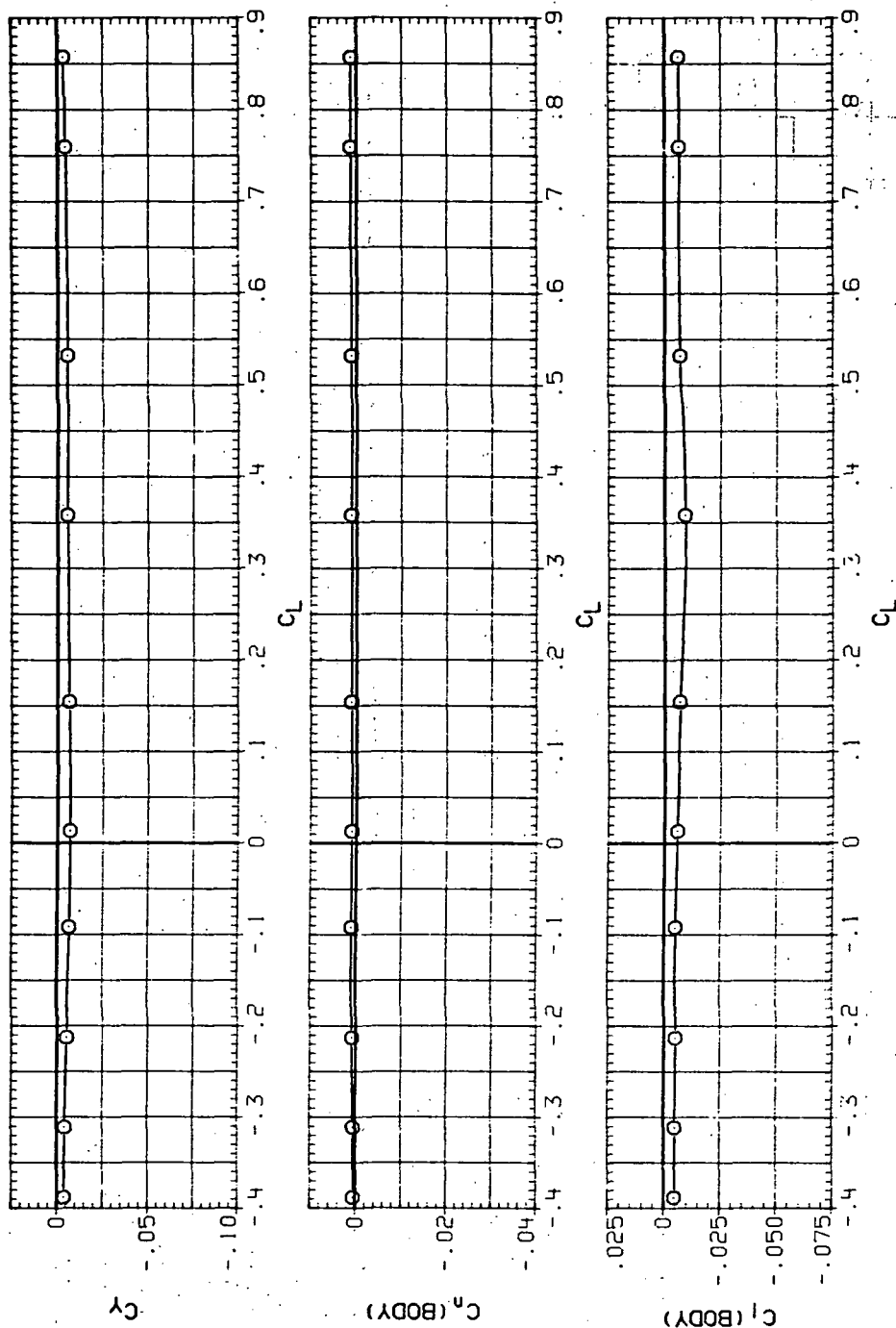


(d) L/D vs C_L

Figure 48. — Continued.

DATA SET SYMBOL CONFIGURATION
RJR006 O 9408 (AL)

RN/L 0 (NSH)
6.230 15.000

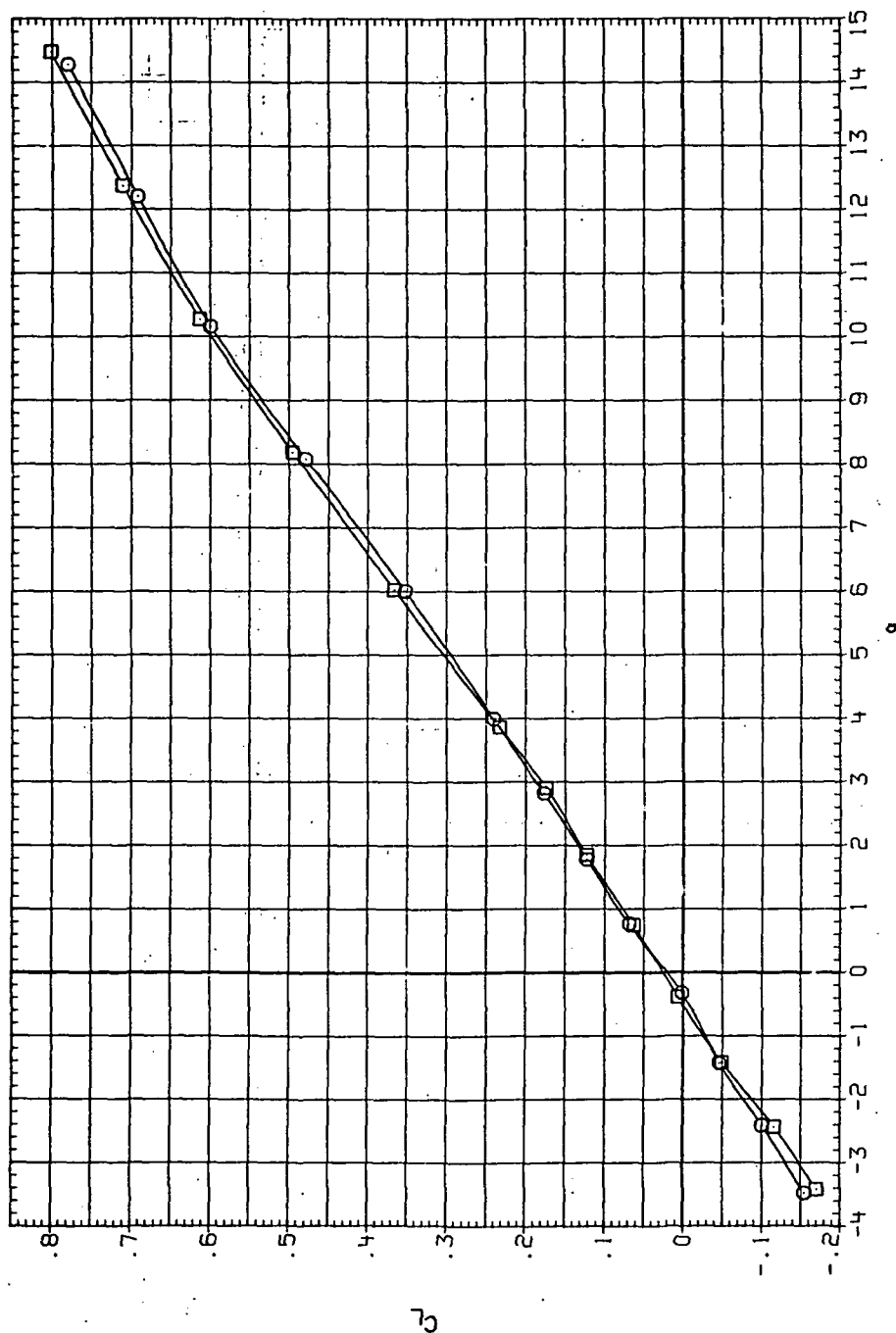


(e) C_Y , C_n and C_l vs C_L .

Figure 48.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RUR173 7445B (STEEL)
 RUR219 7445B (STEEL)

RV/L Q (NSM)
 8.230 7.480
 8.200 9.900

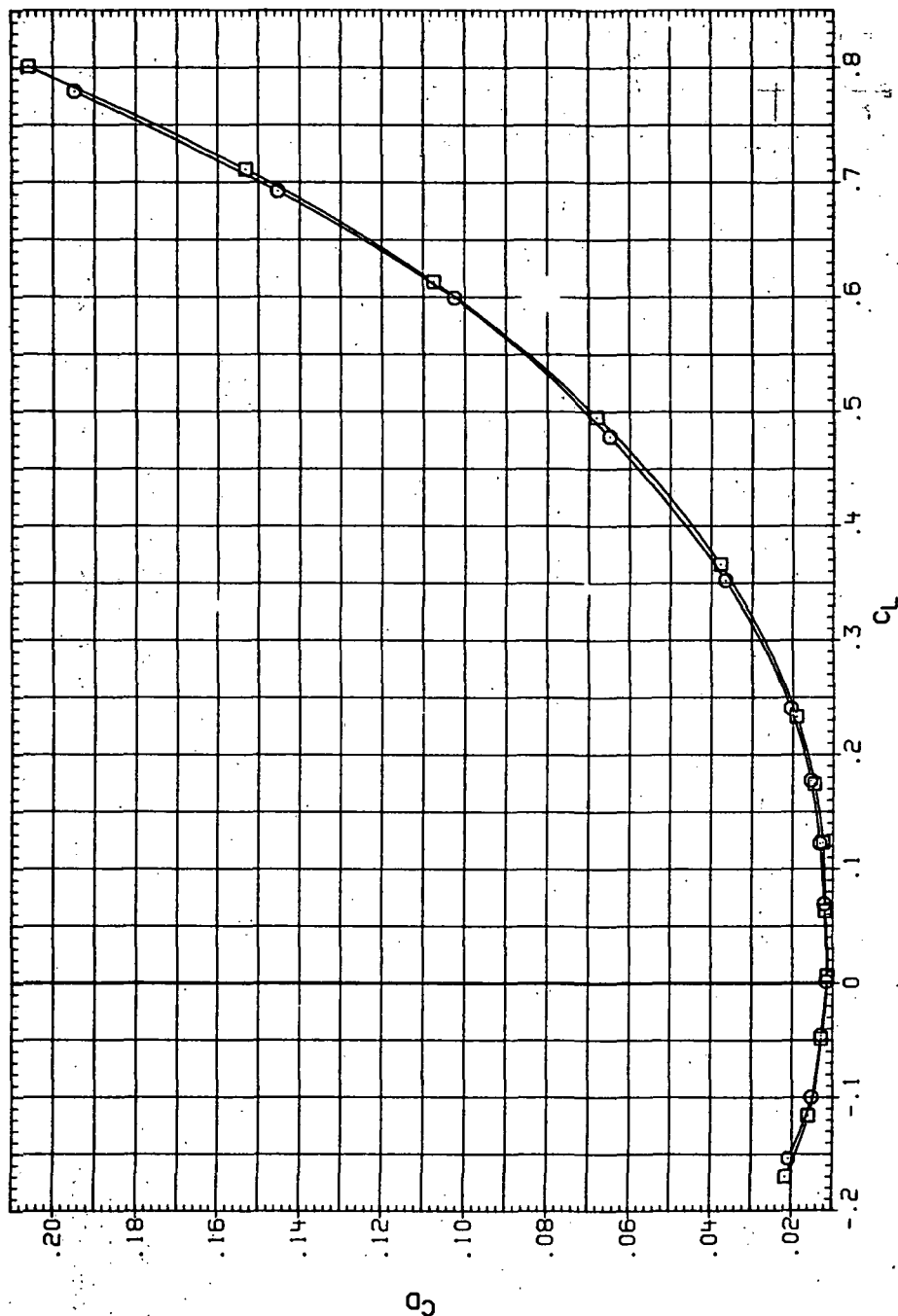


(a) C_L vs α .

Figure 49.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.4$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR173 ○ 7AN5B (STEEL)
 RJR219 □ 7AN5B (STEEL)

RM/L Q (INCH)
 6.230 7.480
 8.200 9.900

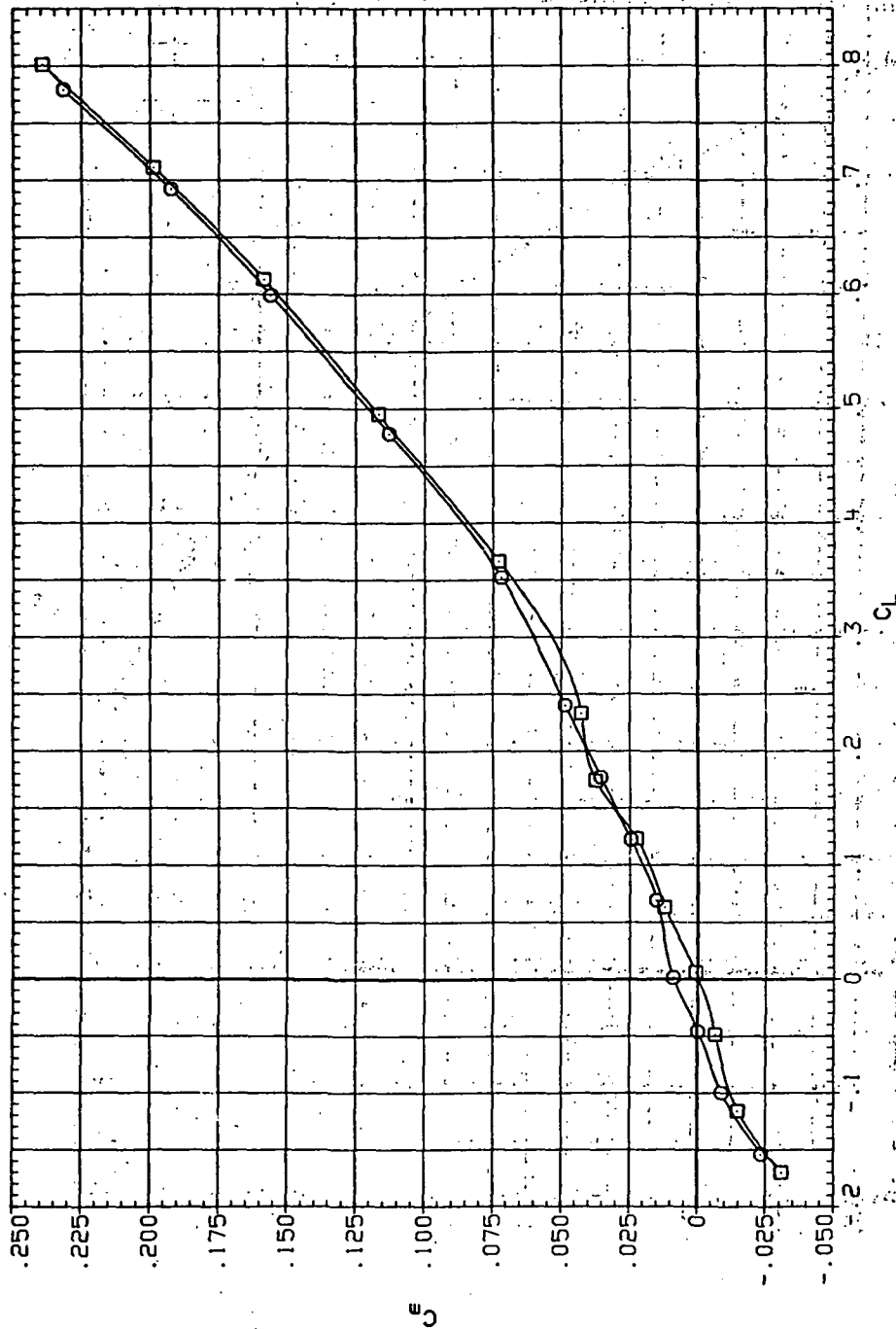


(b) C_D vs C_L .

Figure 49.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR173 $\square$ 74"SB (STEEL)
 RJR219 $\circ$ 74"SB (STEEL)

RV/L Q(NSH)
 6.230 7.480
 8.200 9.900

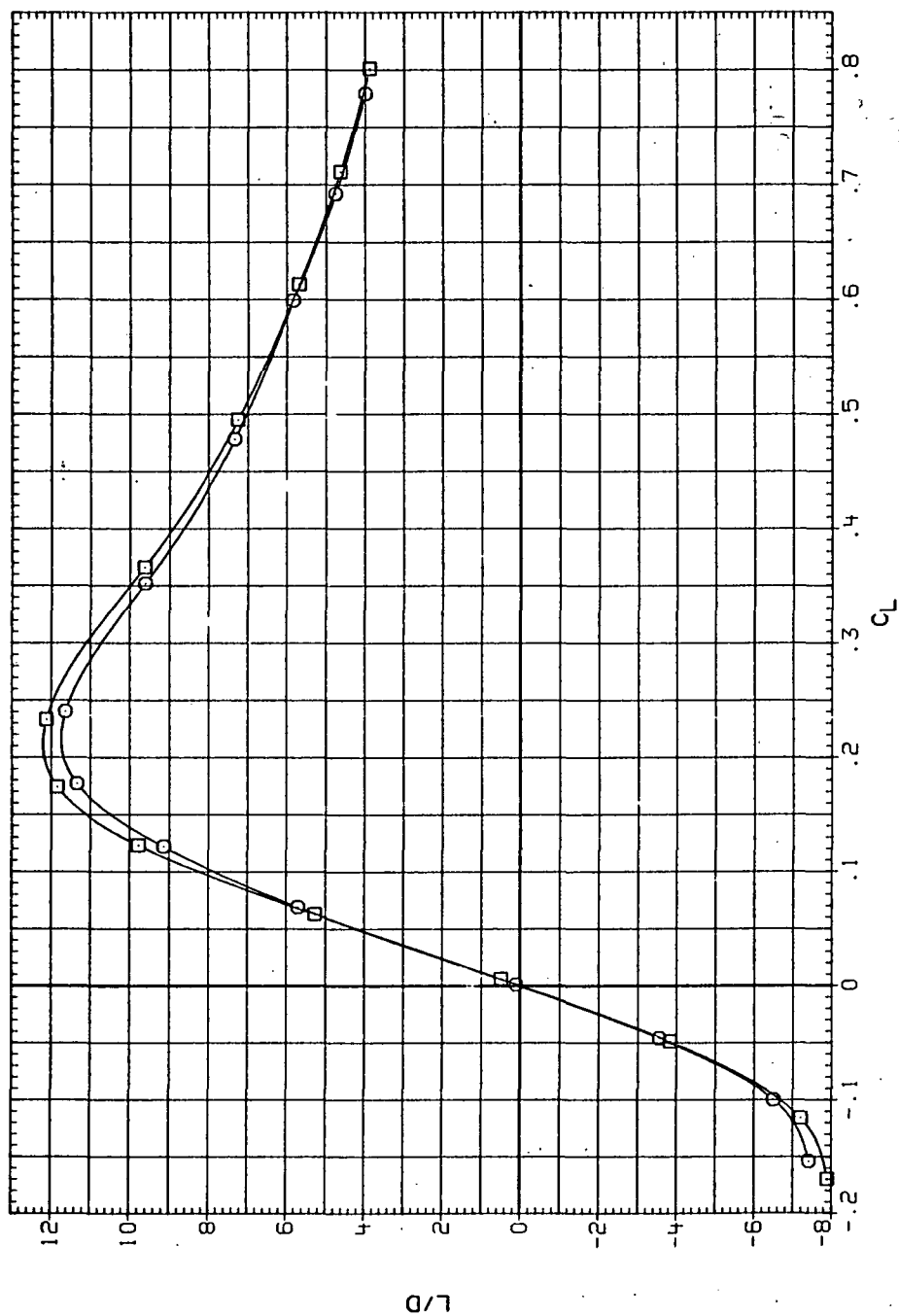


(c) C_m vs C_L .

Figure 49. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR173 ○ 74N5B (STEEL)
 RJR219 □ 74N5B (STEEL)

RN/L Q(N,3H)
 6.230 7.480
 8.200 9.900

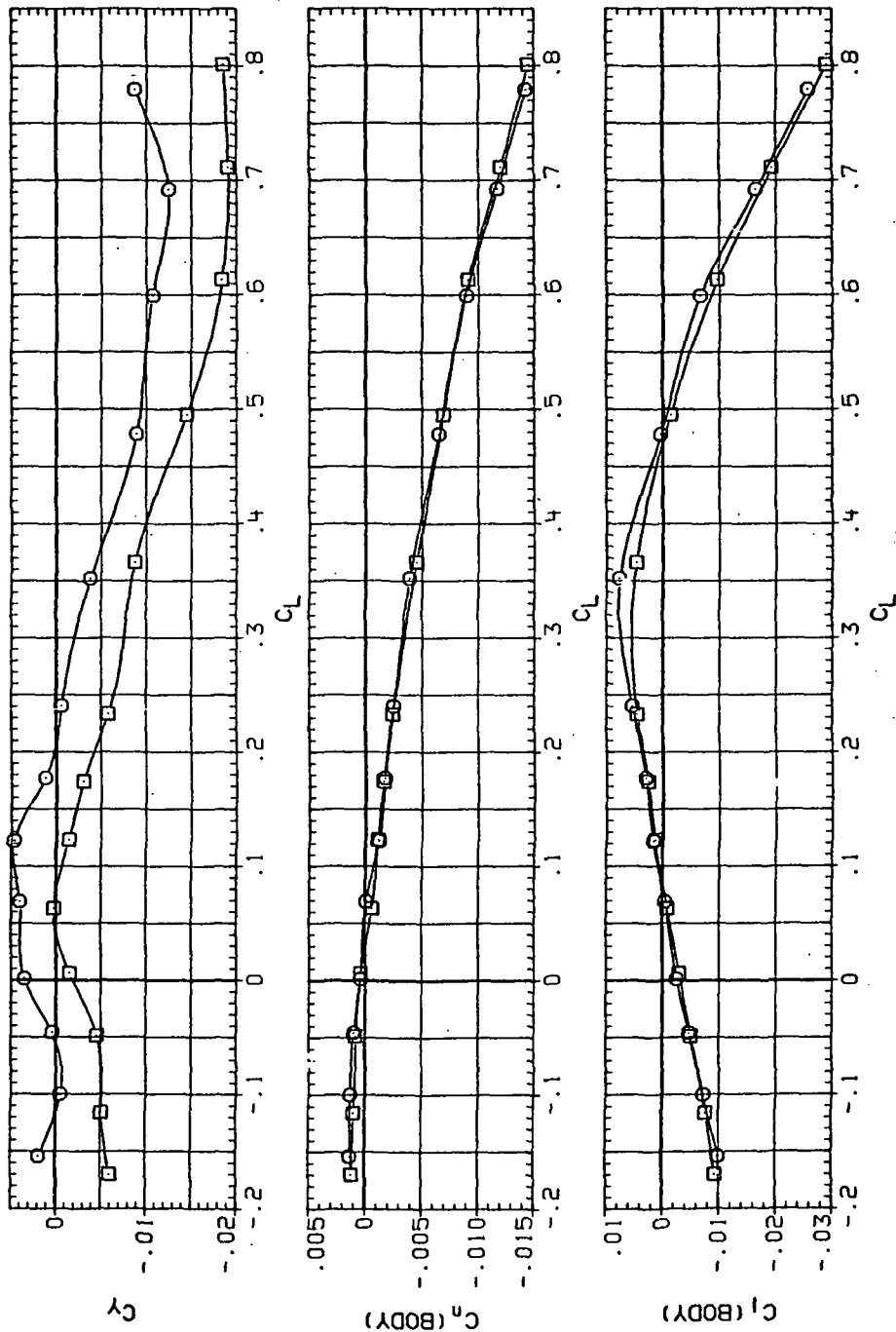


(d) L/D vs C_L .

Figure 49.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP173 $\square$ 7445B (STEEL)
 RUP219 $\square$ 7445B (STEEL)

RN/L Q(NSM)
 8.230 7.480
 8.200 9.900

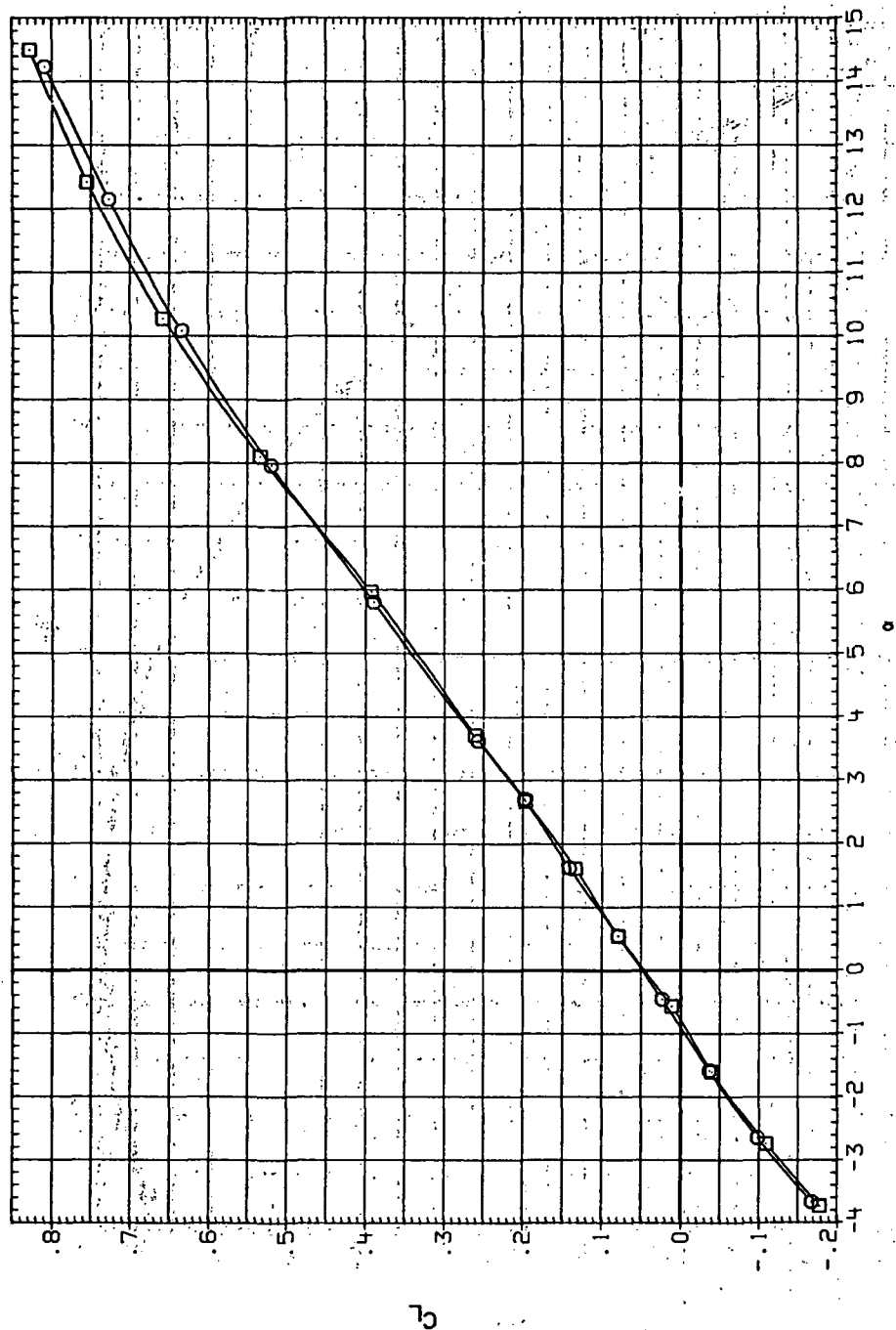


(e) C_Y , C_n and C_l vs C_L .

Figure 49. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RUI174 $\square$ 7445B (STEEL)
 RUI220 $\square$ 7445B (STEEL)

RV/L Q (NSM)
 6.230 13.600
 8.200 14.100

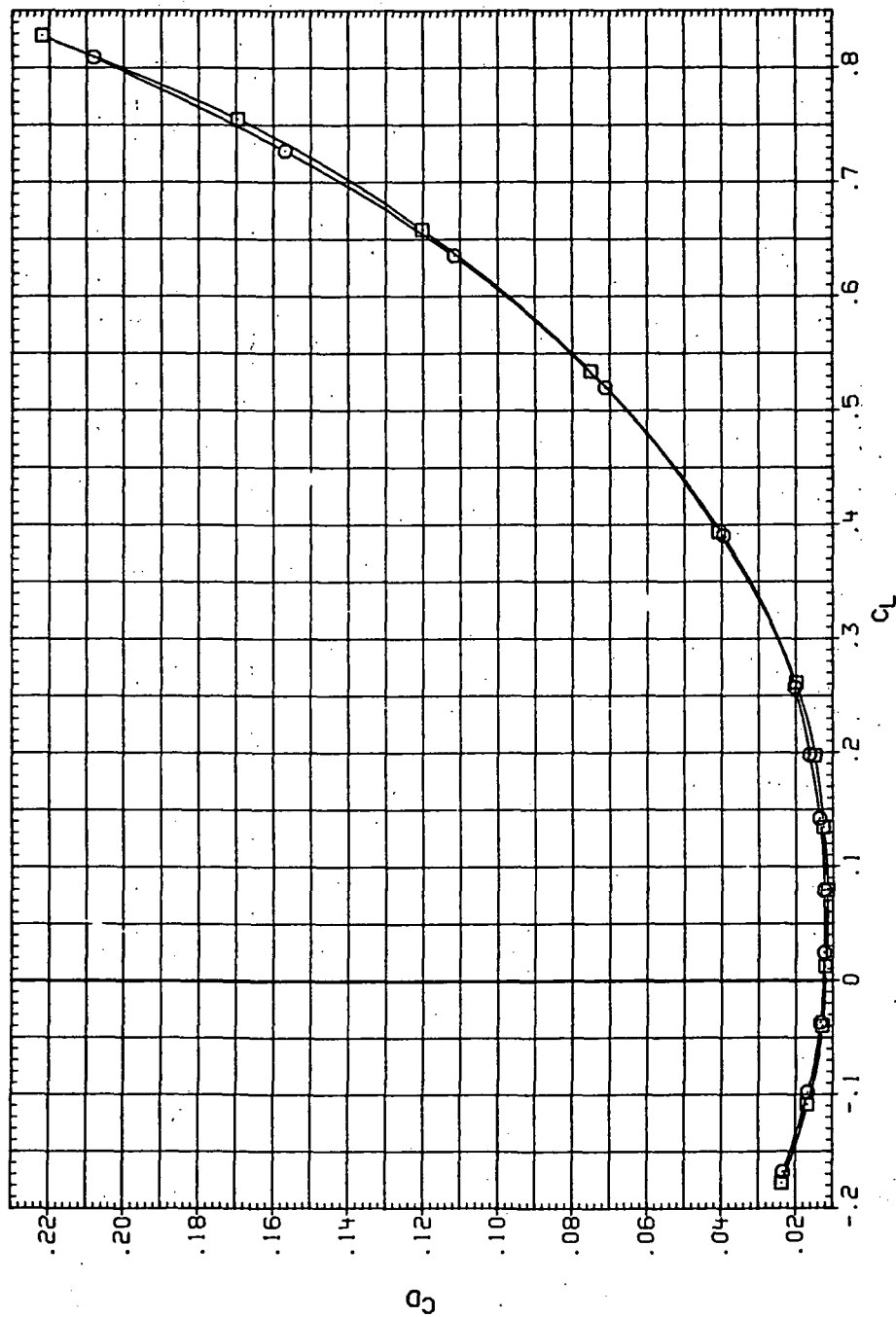


(a) C_L vs α .

Figure 50.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR174 ○ 74N58 (STEEL)
 RJR220 □ 74N58 (STEEL)

RV/L Q(NSH)
 6.230 10.030
 8.200 14.100

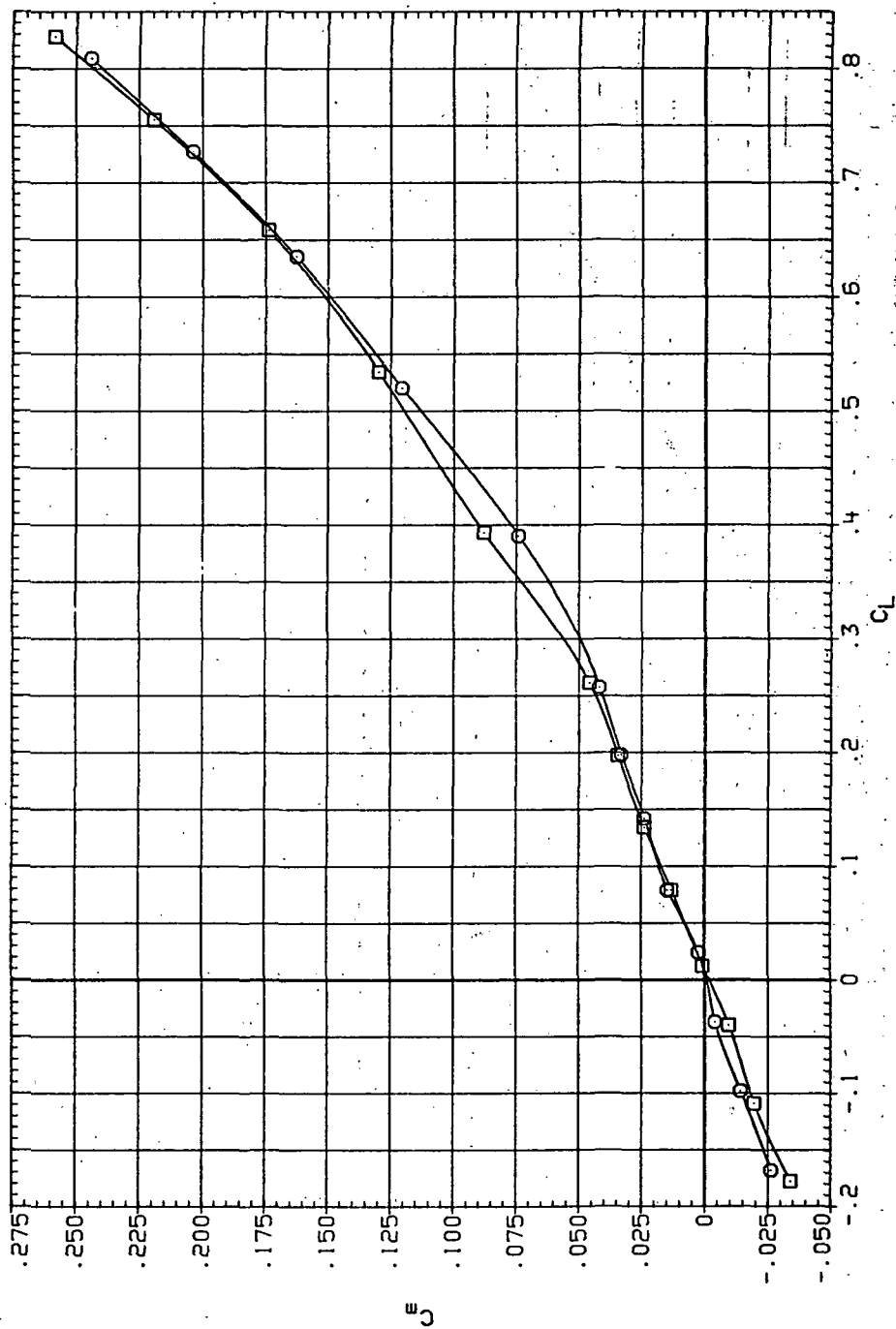


(b) C_D vs C_L .

Figure 50.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR174 ○ 74W5B (STEEL)
 RJR220 □ 74W5B (STEEL)

RV/L 2 (INSH)
 6.230 10.600
 8.200 14.100

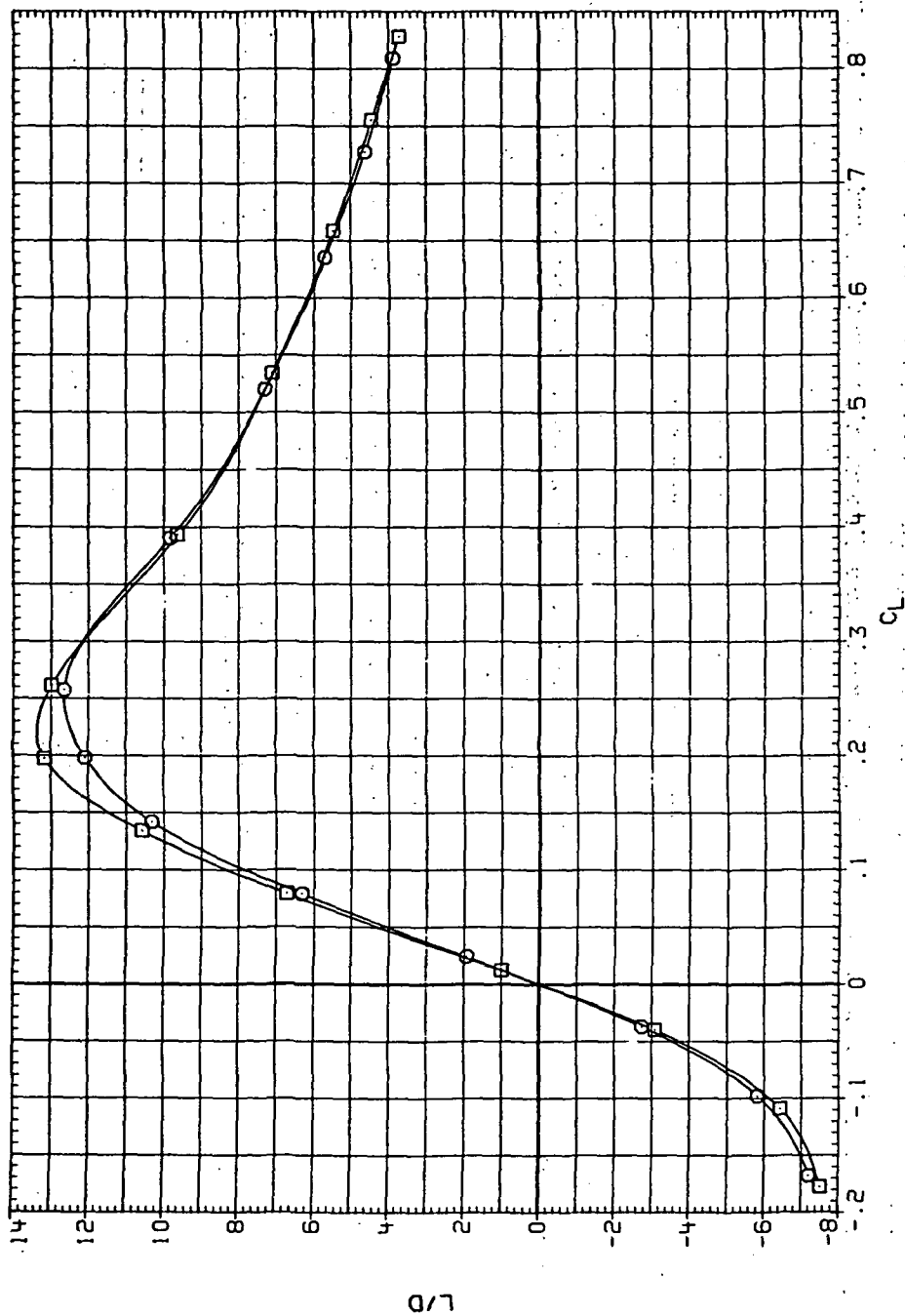


(c) C_m vs C_L .

Figure 50.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR174 74N5B (STEEL)
 RJR220 74N5B (STEEL)

RN/L Q(NSH)
 6.230 10.600
 8.200 14.100

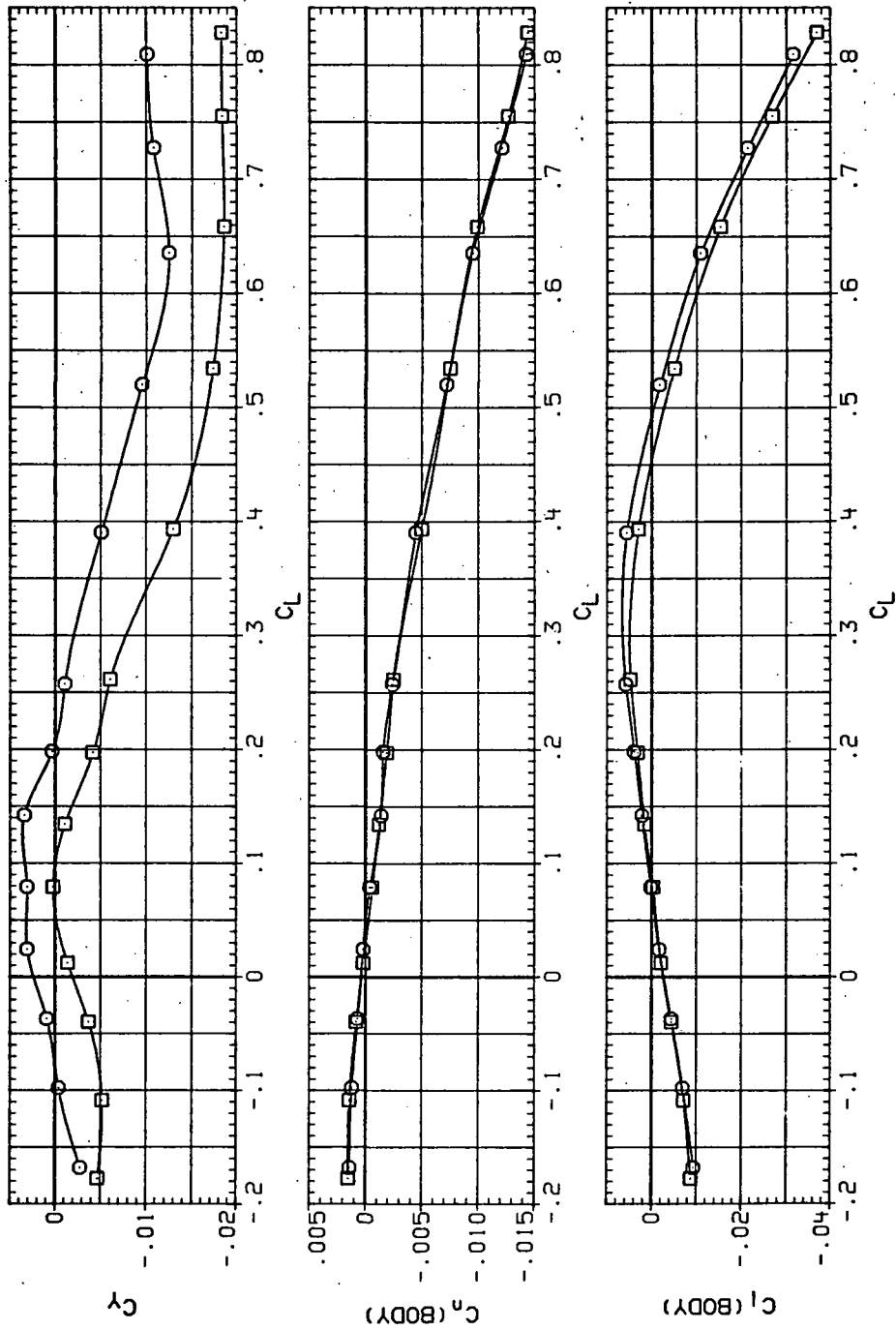


(d) L/D vs C_L .

Figure 50.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR174 ○ 7445B (STEEL)
 RJR220 □ 7445B (STEEL)

RV/L Q(NSM)
 8.230 10.600
 8.200 14.100

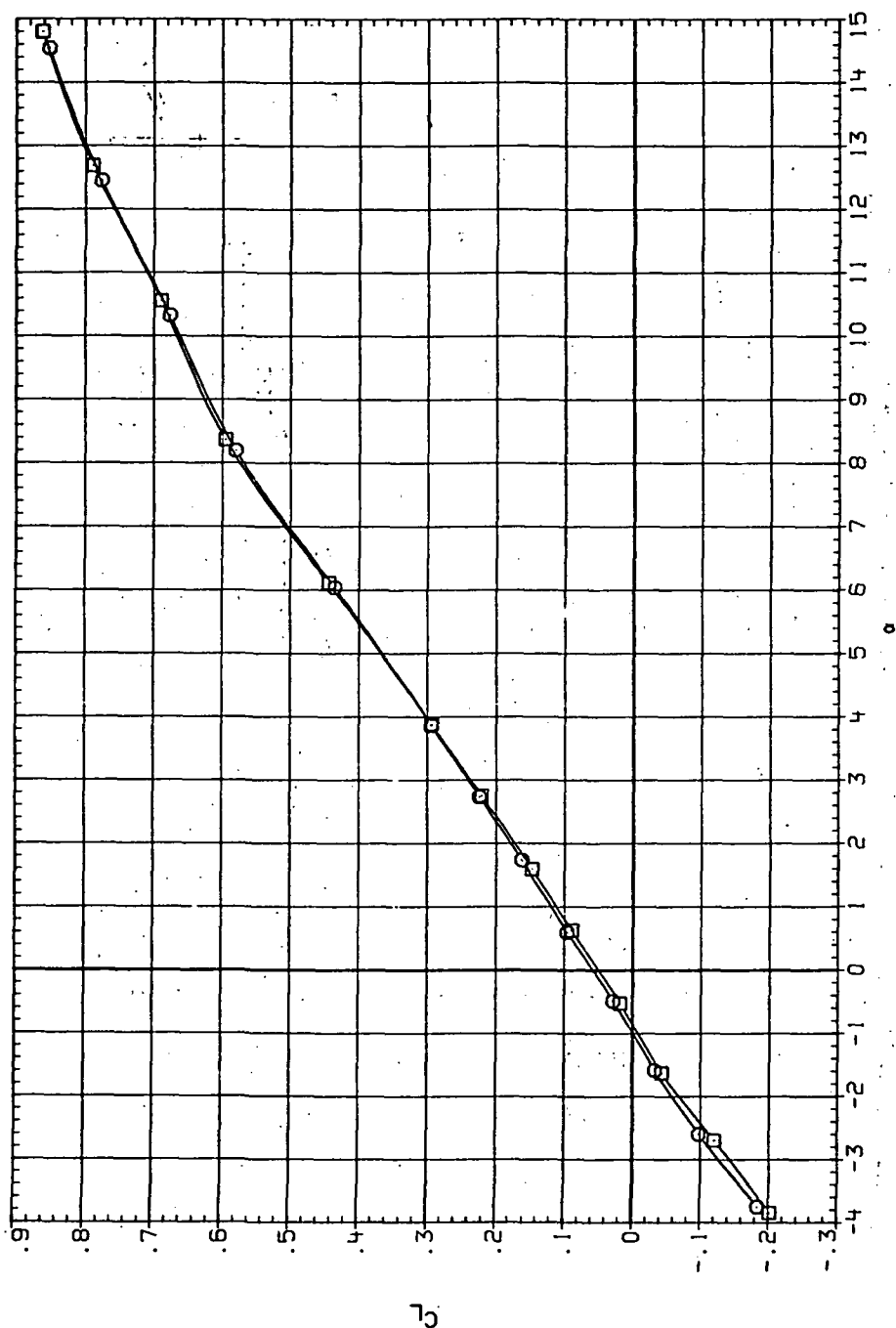


(e) C_Y , C_n and C_l vs C_L .

Figure 50.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR175 $\square$ 74N5B (STEEL)
 RJR221 $\circ$ 74N5B (STEEL)

RN/L Q(NSM)
 6.230 13.400
 8.200 17.600

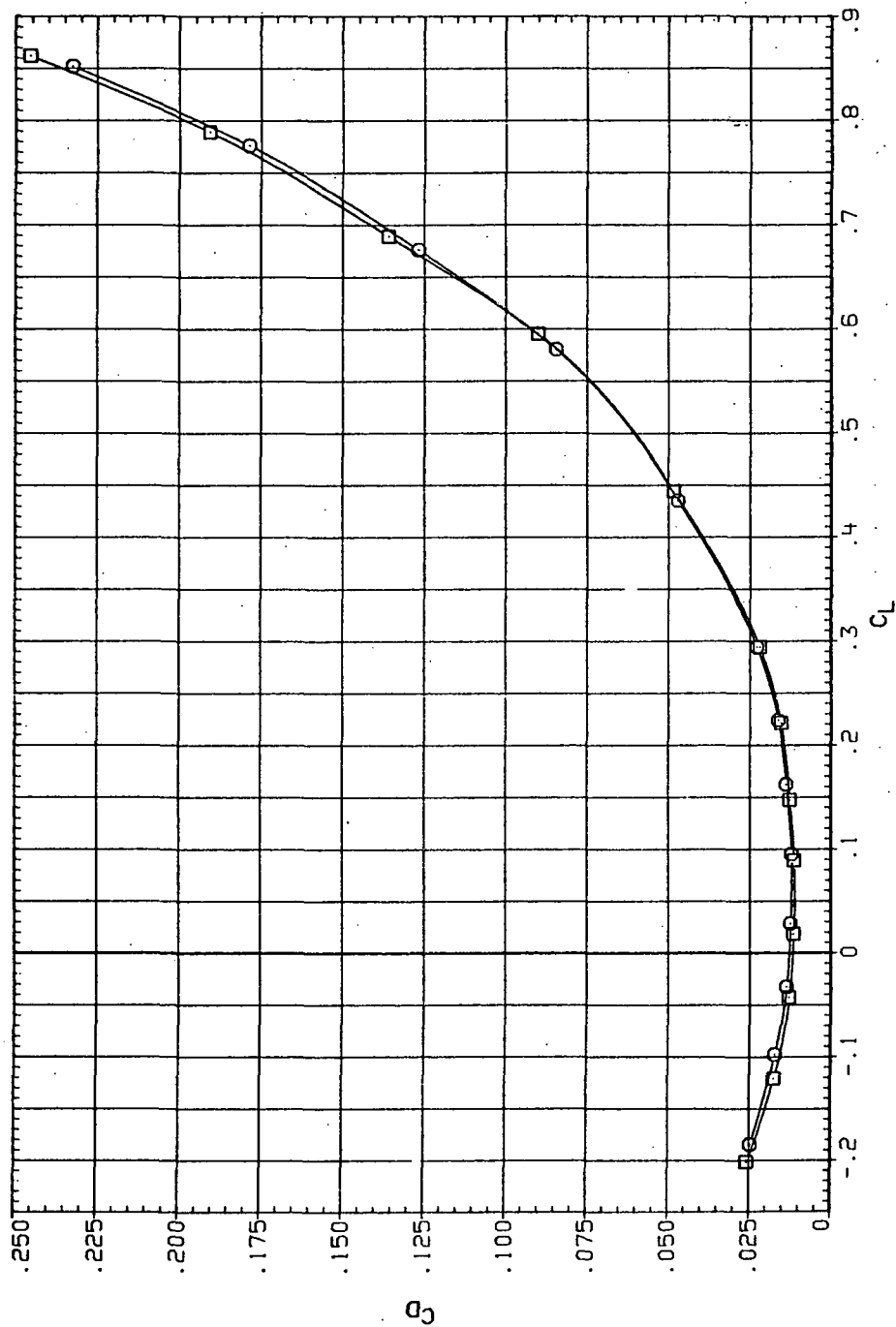


(a) C_L vs α .

Figure 51. — Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR175  7445B (STEEL)
 RJR221  7445B (STEEL)

RV/L Q(NS)
 6.230 13.400
 6.200 17.800

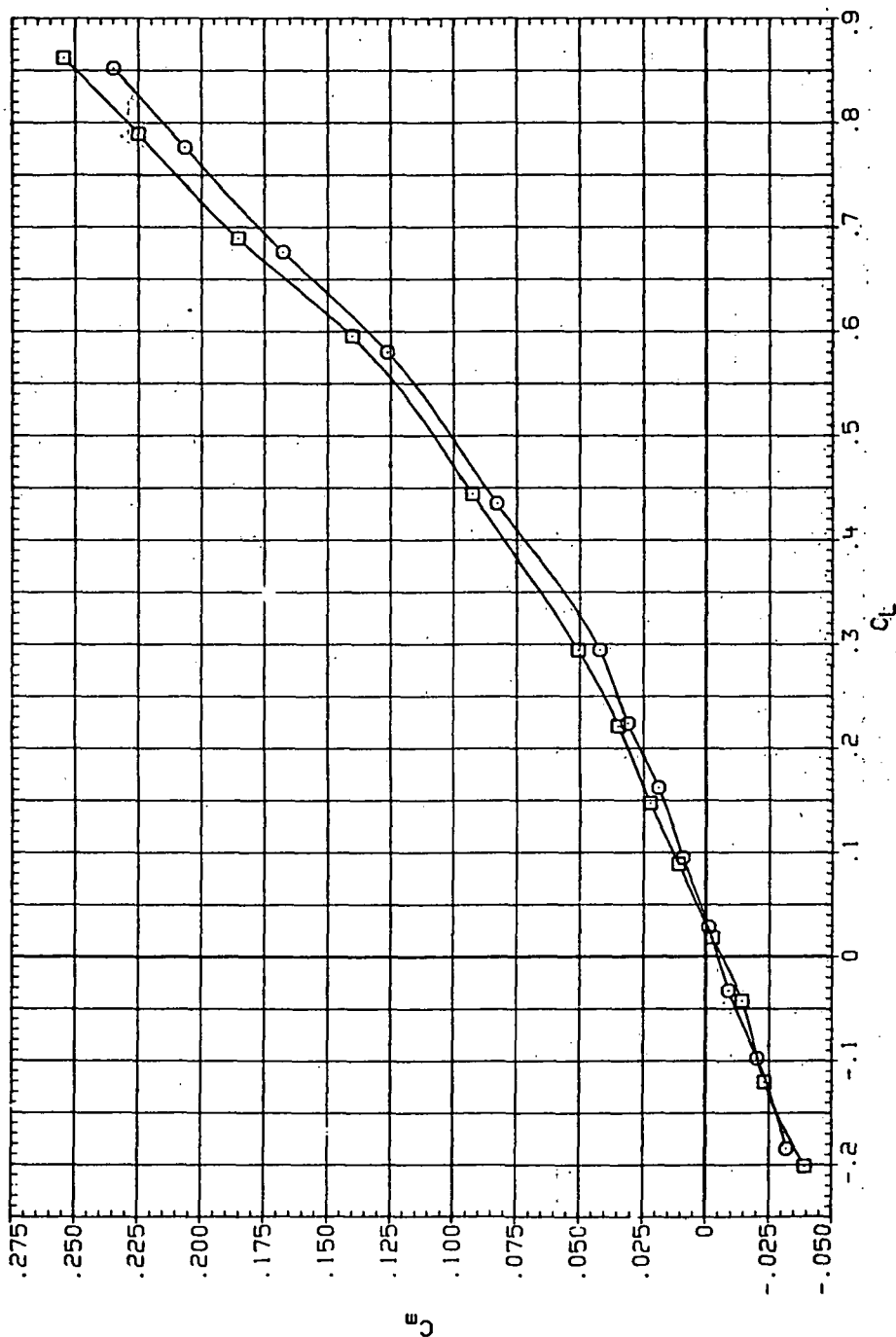


(b) C_D vs C_L .

Figure 51.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR175 ○ 7H45B (STEEL)
 RJR221 □ 7H45B (STEEL)

RN/L Q(NSH)
 6.230 13.400
 8.200 17.800

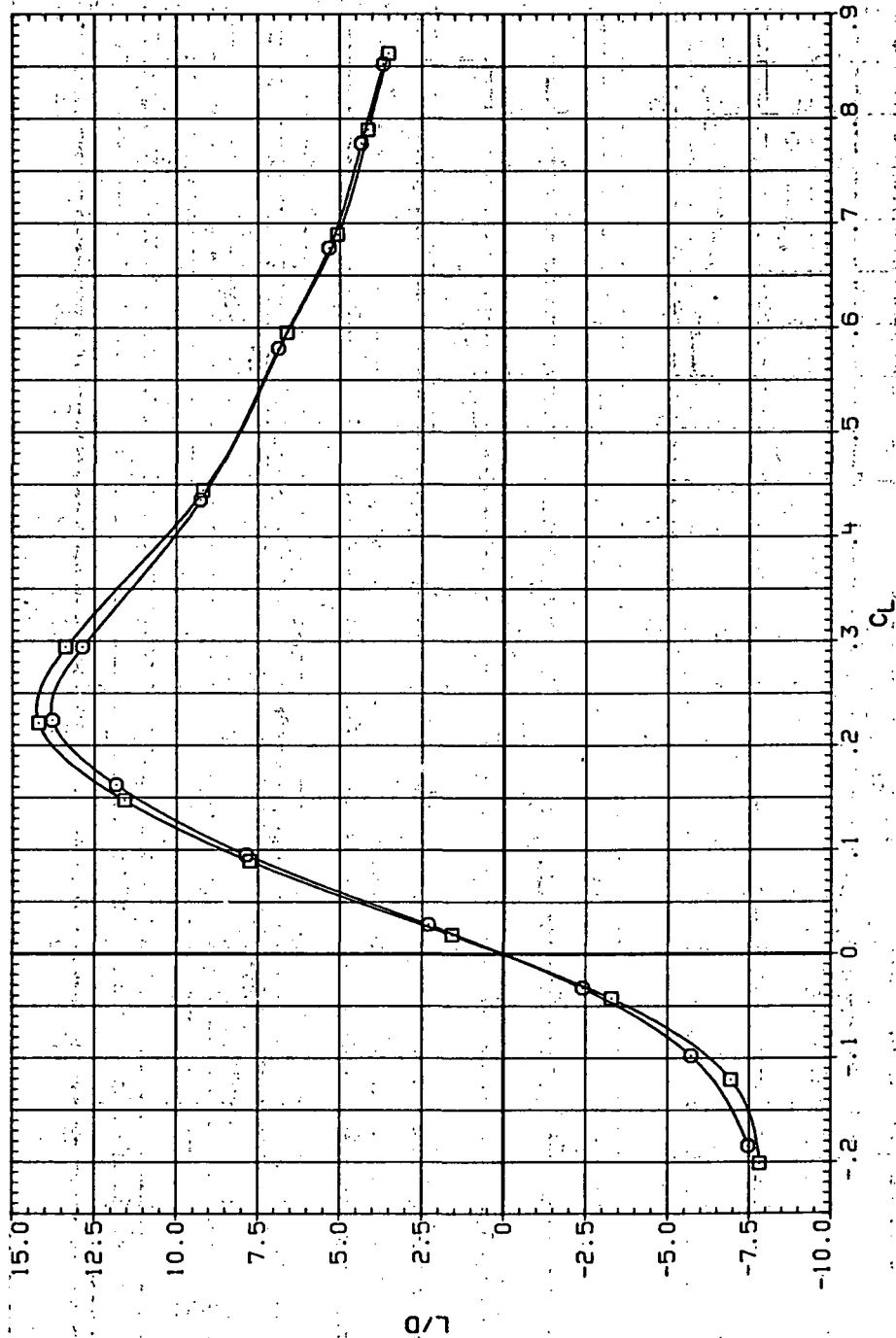


(c) C_m vs C_L

Figure 51.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUI75 $\square$ 7445B (STEEL)
 RUI221 $\square$ 7445B (STEEL)

RN/L Q(NSH)
 6.230 13.30
 8.200 17.800

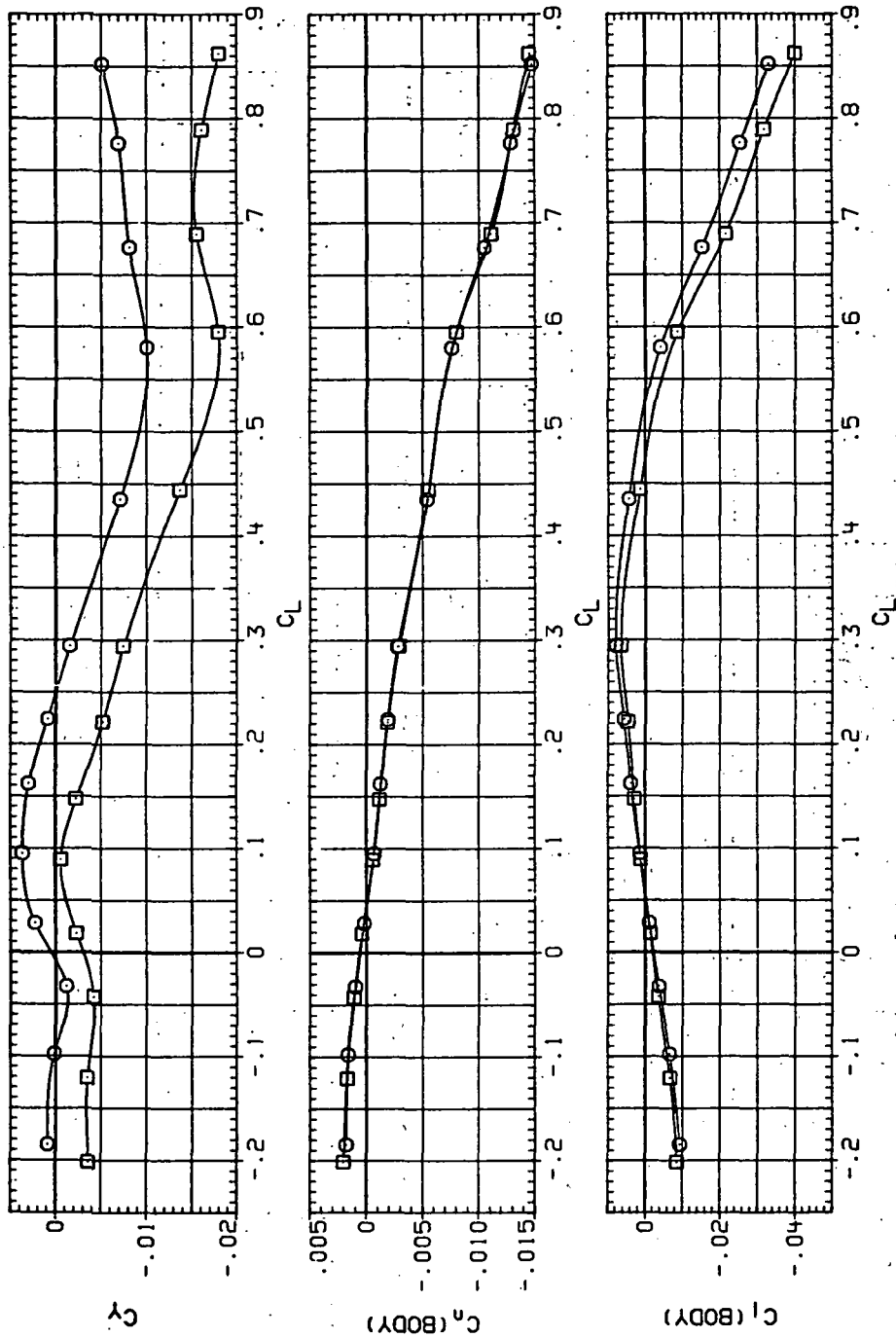


(d) L/D vs C_L .

Figure 51.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP175 7445B (STEEL)
 RUP221 7445B (STEEL)

RN/L Q (NSM)
 6.230 13.400
 8.500 17.800

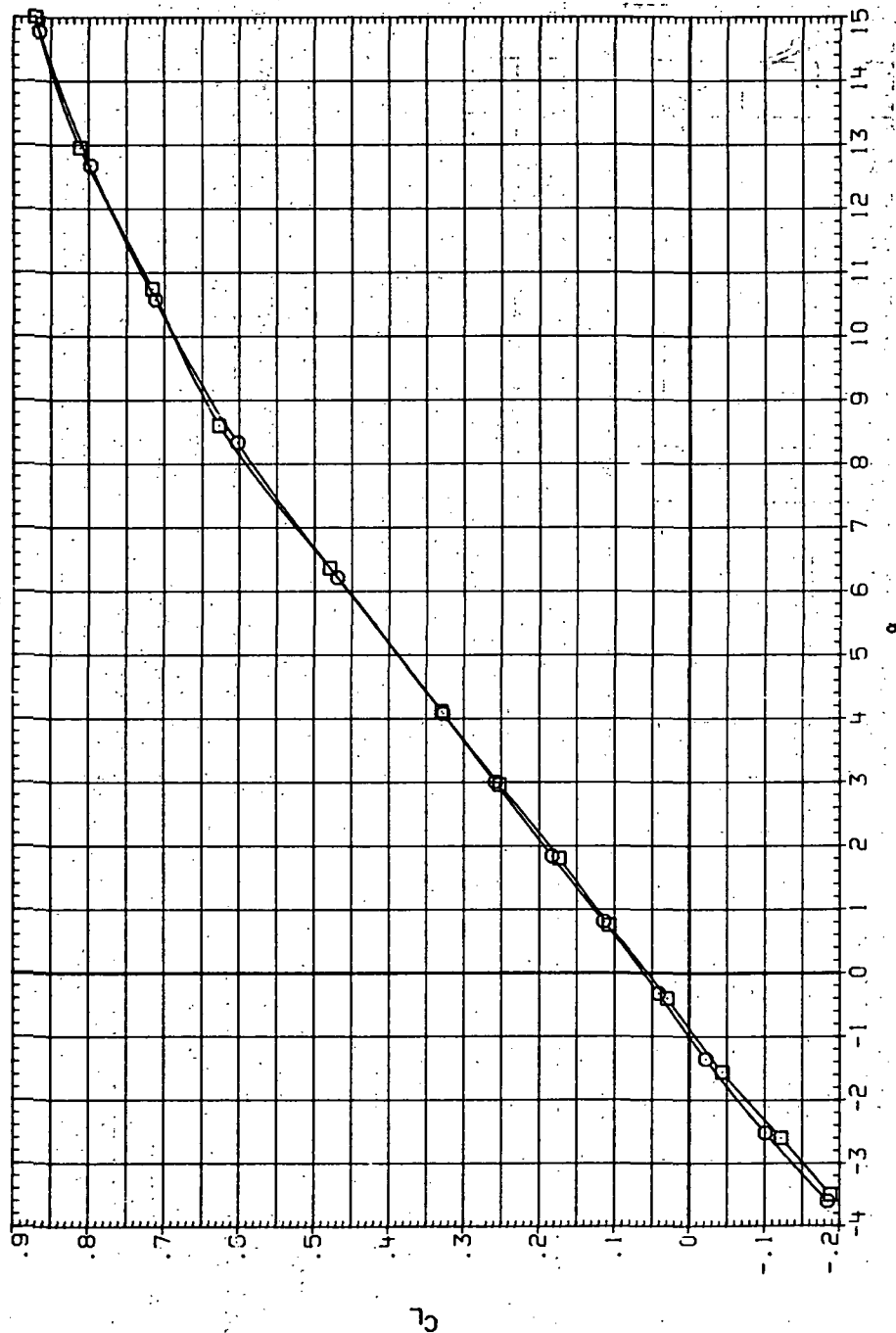


(e) C_Y , C_n and C_l vs C_L .

Figure 51.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR176 $\square$ 74458 (STEEL)
 RJR222 $\square$ 74458 (STEEL)

RN/L Q (NSM)
 6.230 14.500
 8.200 19.200

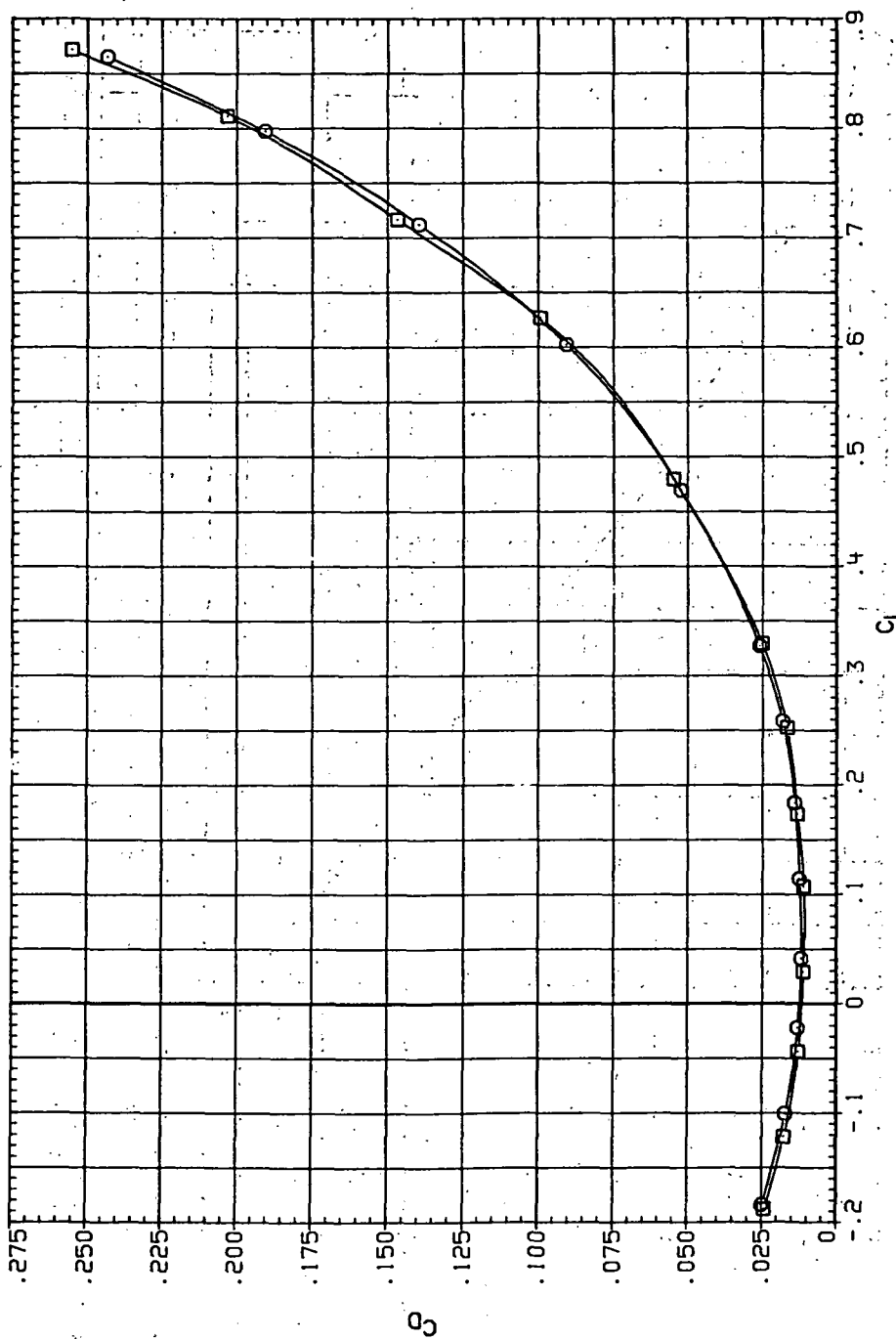


(a) C_L vs α .

Figure 52.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.9$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR176 □ 7A-5B (STEEL)
 RJR222 ○ 7A-5B (STEEL)

RN/L Q (NSM)
 6.230 14.500
 8.200 19.200

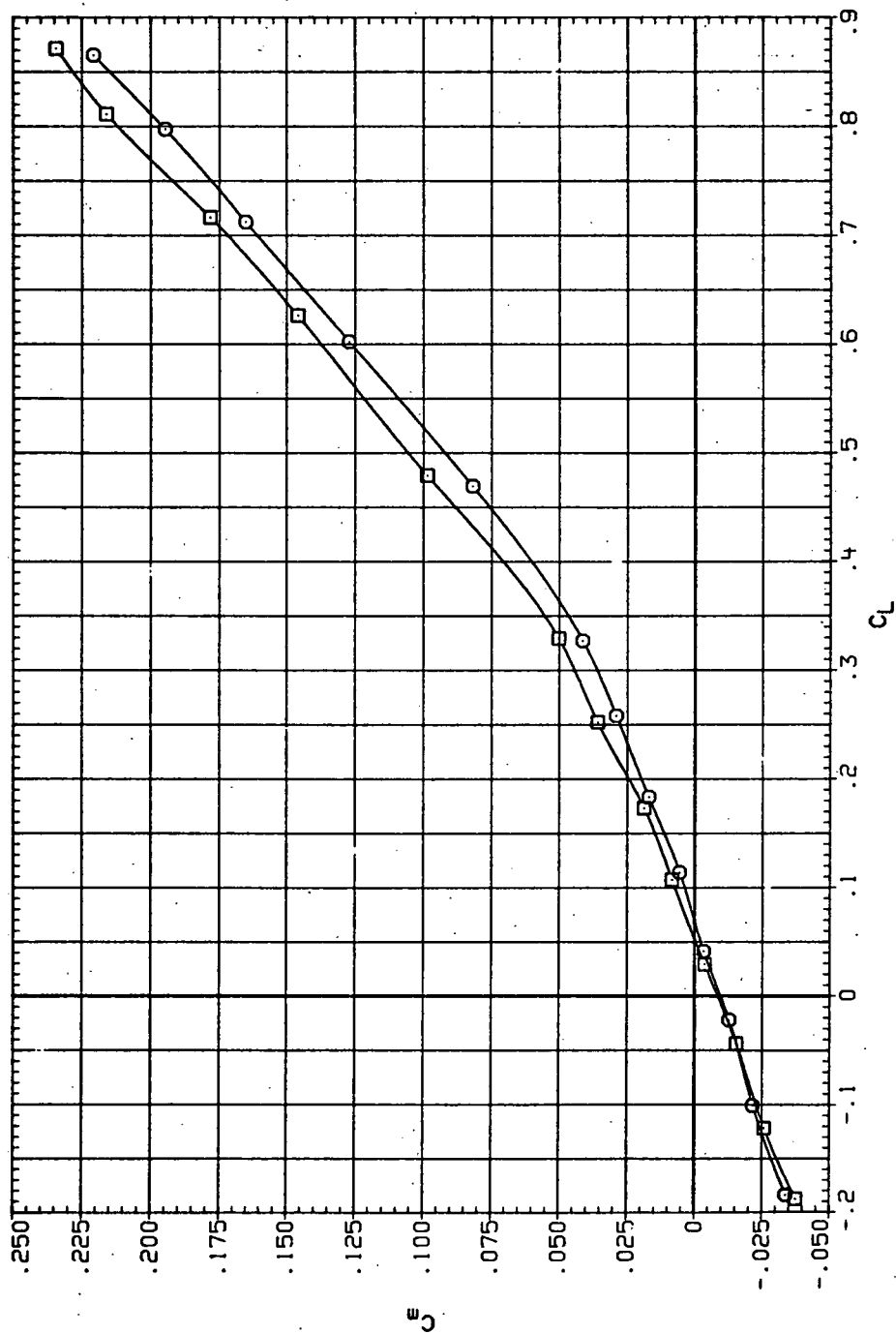


(b) C_D vs C_L

Figure 52.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR176 $\circ$ 74458 (STEEL)
 RJR222 $\square$ 74458 (STEEL)

RV/L Q (NSH)
 6.230 14.500
 8.200 19.200

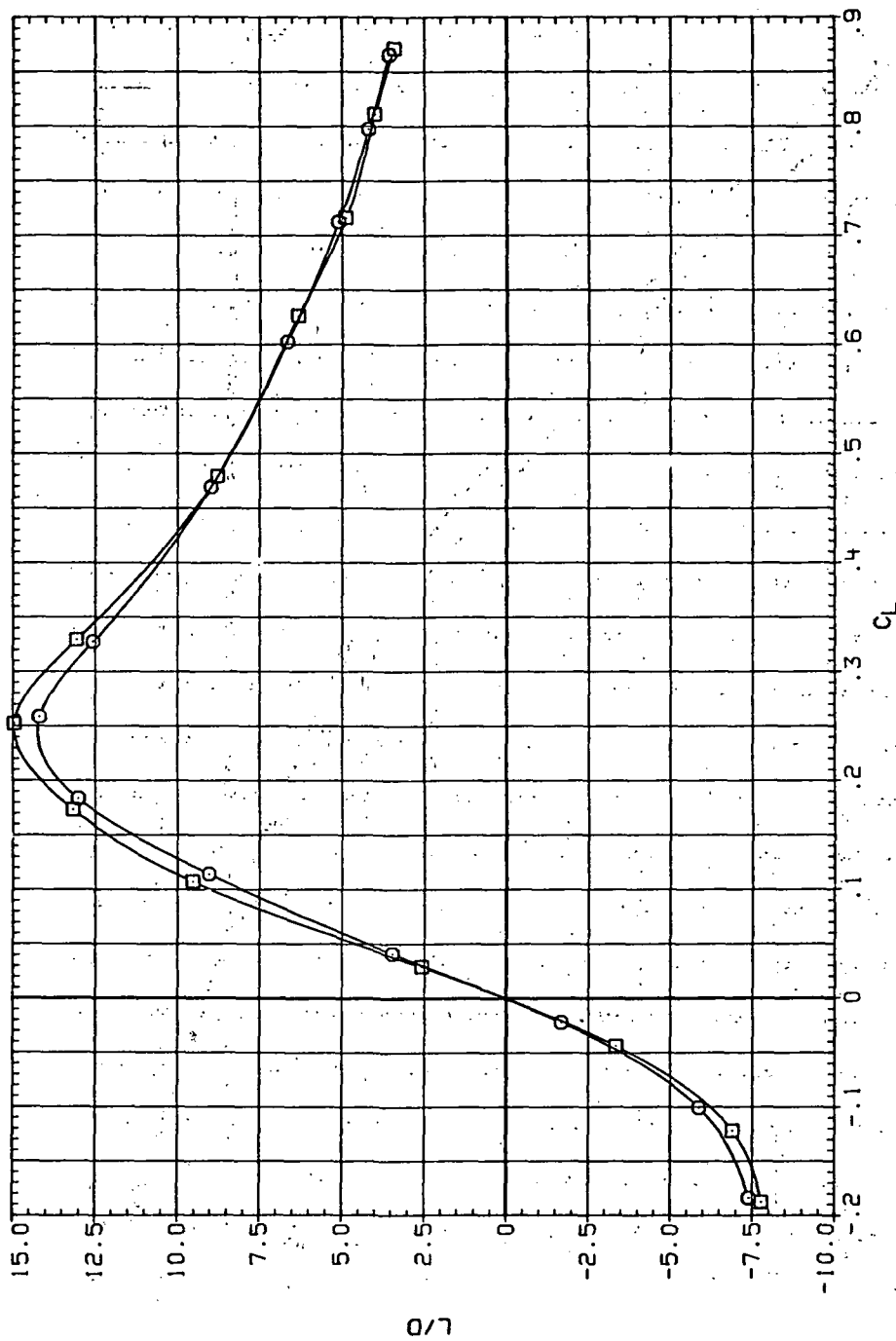


(c) C_m vs C_L .

Figure 52.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUR176 $\square$ 7445B (STEEL)
 RUR222 $\square$ 7445B (STEEL)

RM/LV Q (NEM)
 6.230 14.500
 8.200 19.200

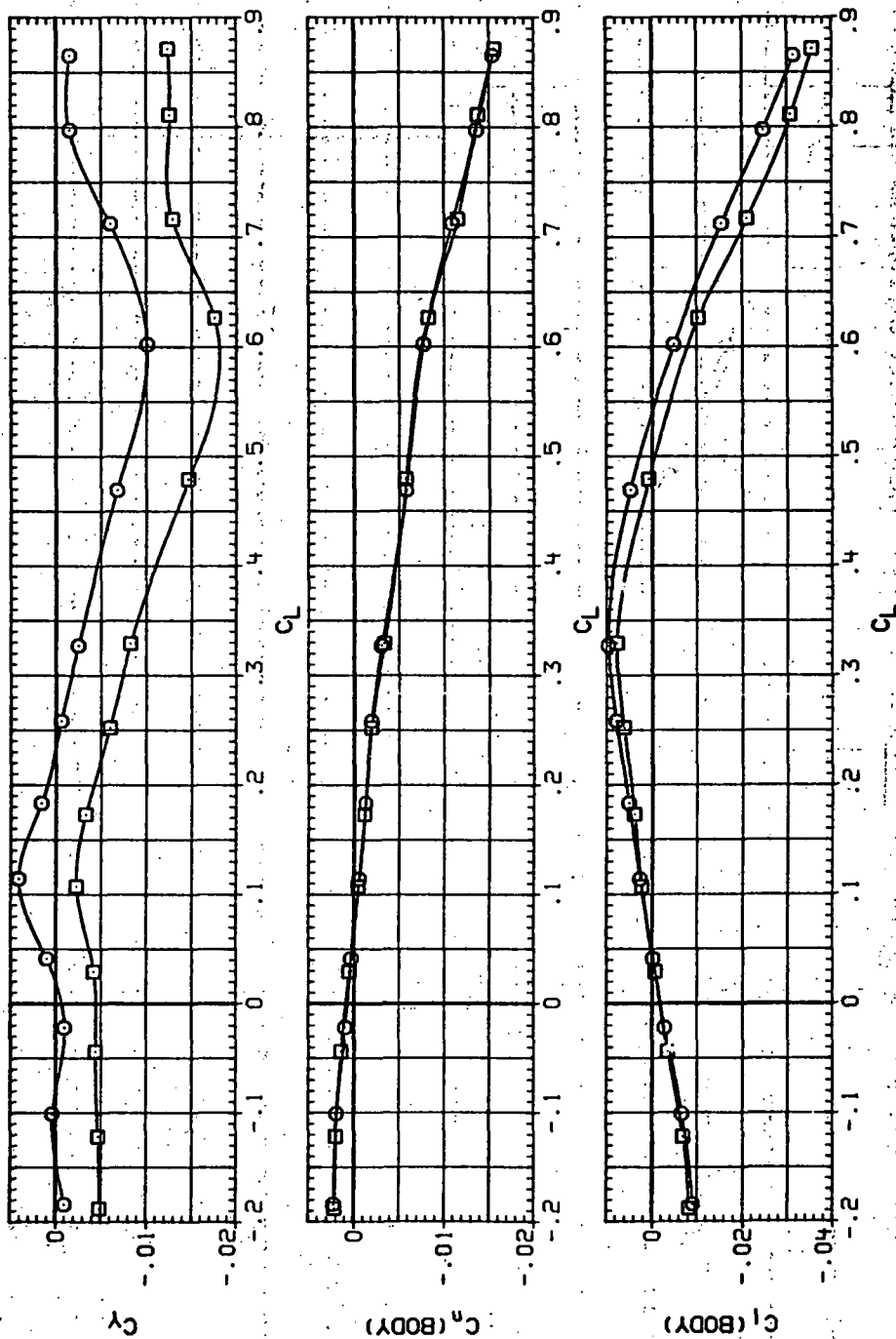


(d) L/D vs C_L

Figure 52.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP176 7145B (STEEL)
 RUP222 7145B (STEEL)

RV/L QINSH
 6.230 14.500
 8.200 19.200

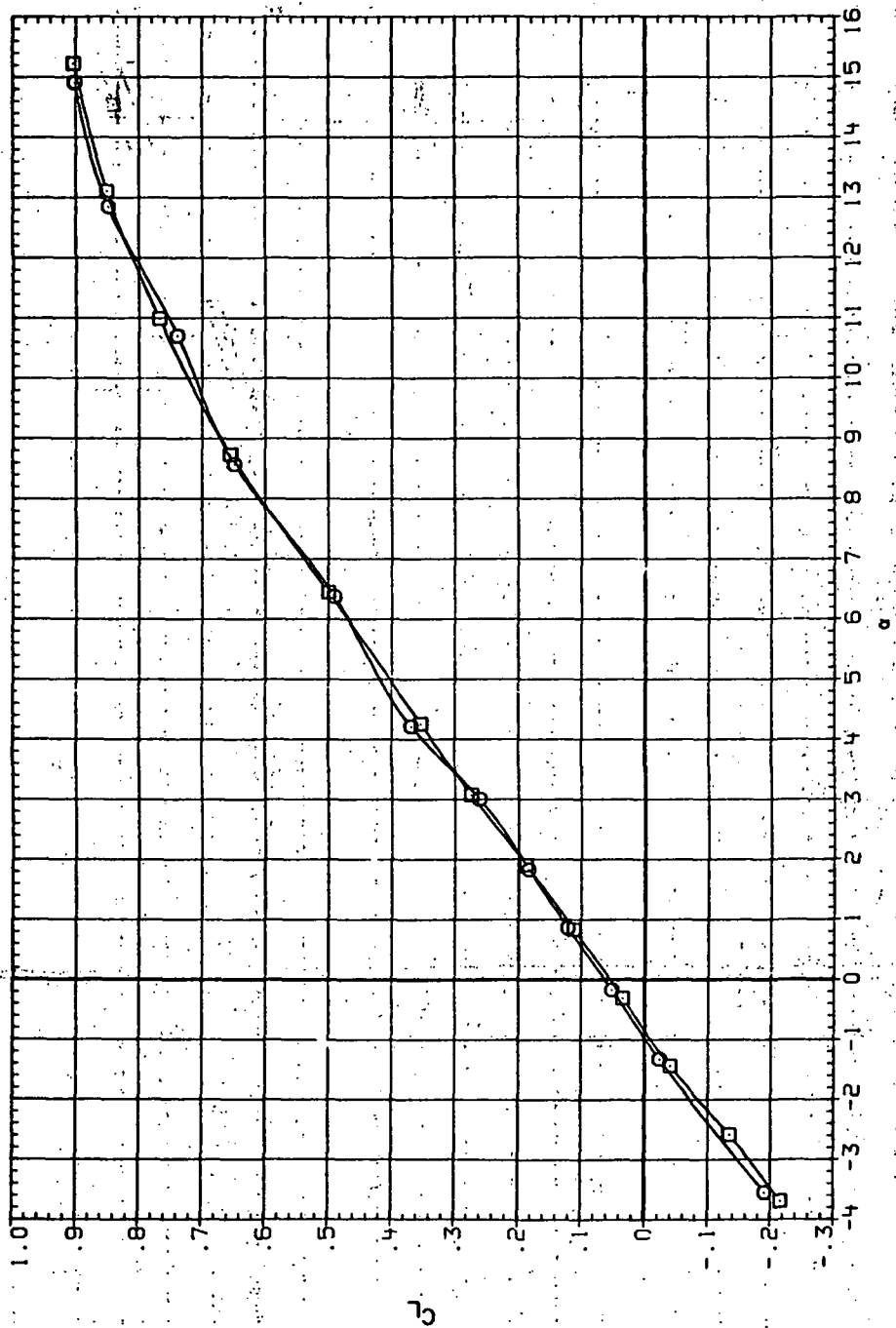


(e) C_Y , C_n and C_l vs C_L .

Figure 52.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR177 74A5B (STEEL)
 RJR223 74A5B (STEEL)

RV/L Q (NSM)
 6.230 15.000
 8.200 19.900

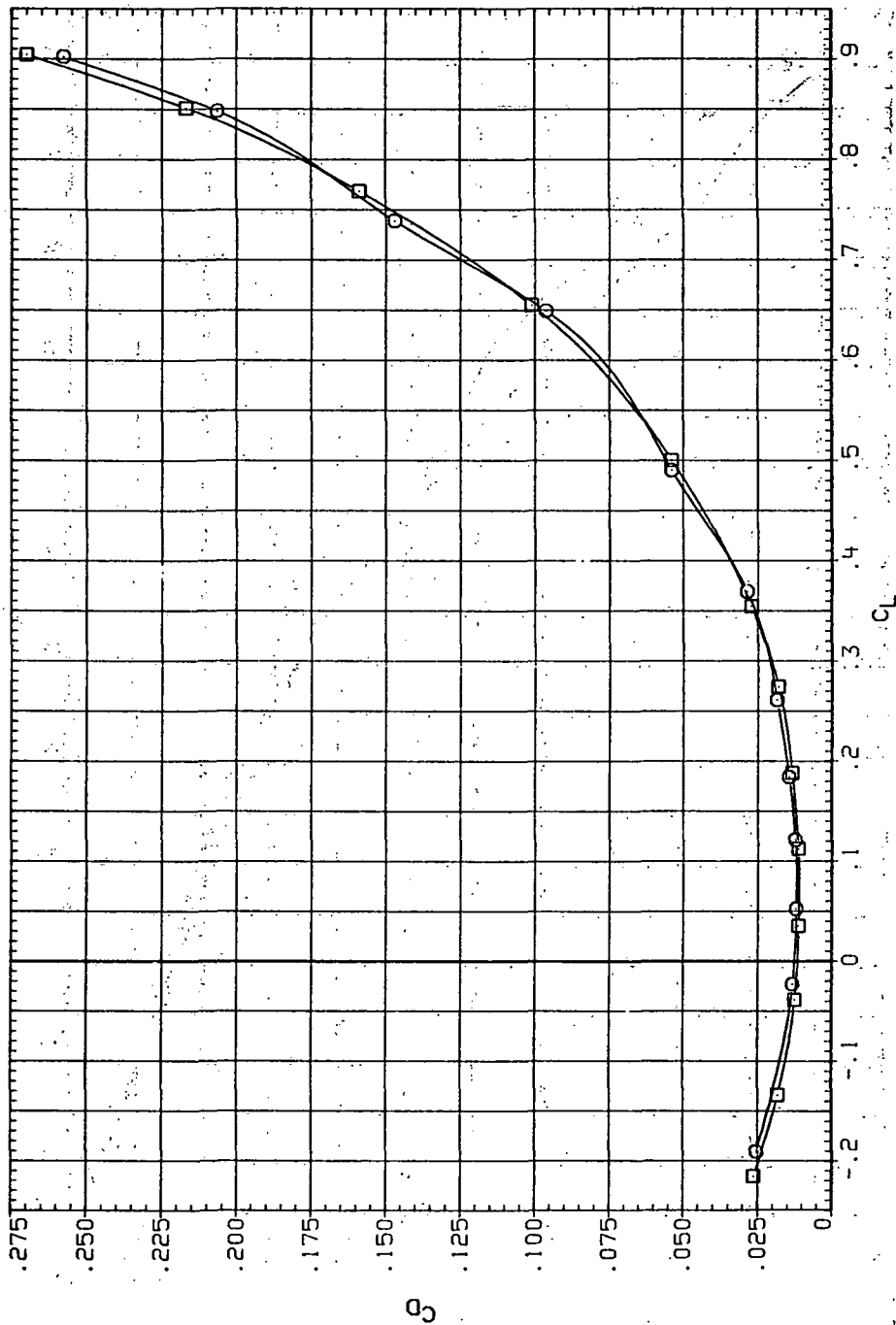


(a) C_L vs α .

Figure 53.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR177 $\square$ 7M4SB (STEEL)
 RJR223 $\square$ 7M4SB (STEEL)

RM/L Q(NSM)
 6.230 15.000
 8.200 19.900

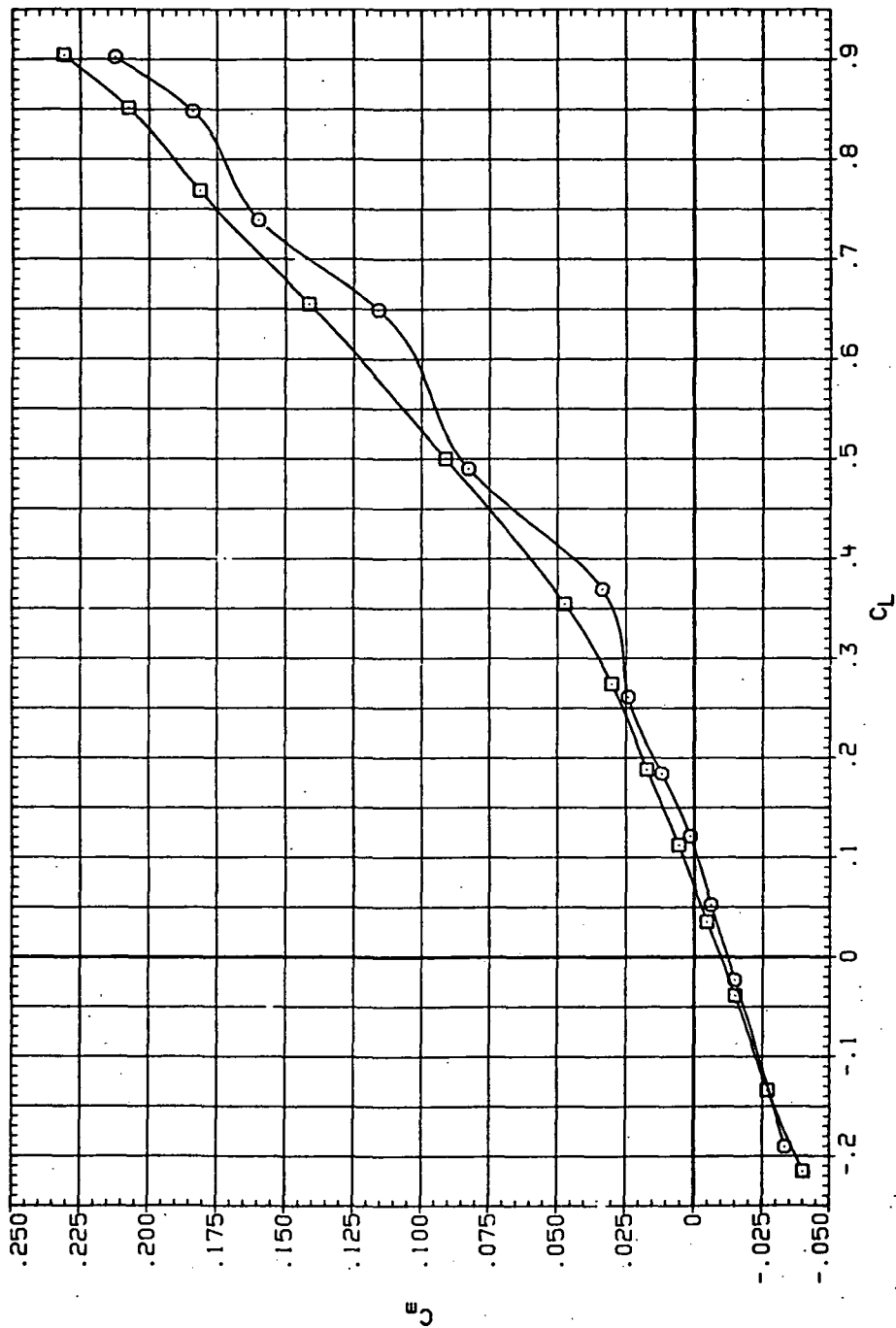


(b) C_D vs C_L

Figure 53.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR177 $\square$ 7445B (STEEL)
 RJR223 $\square$ 7445B (STEEL)

RN/L Q(NSM)
 6.230 15.000
 8.200 19.900

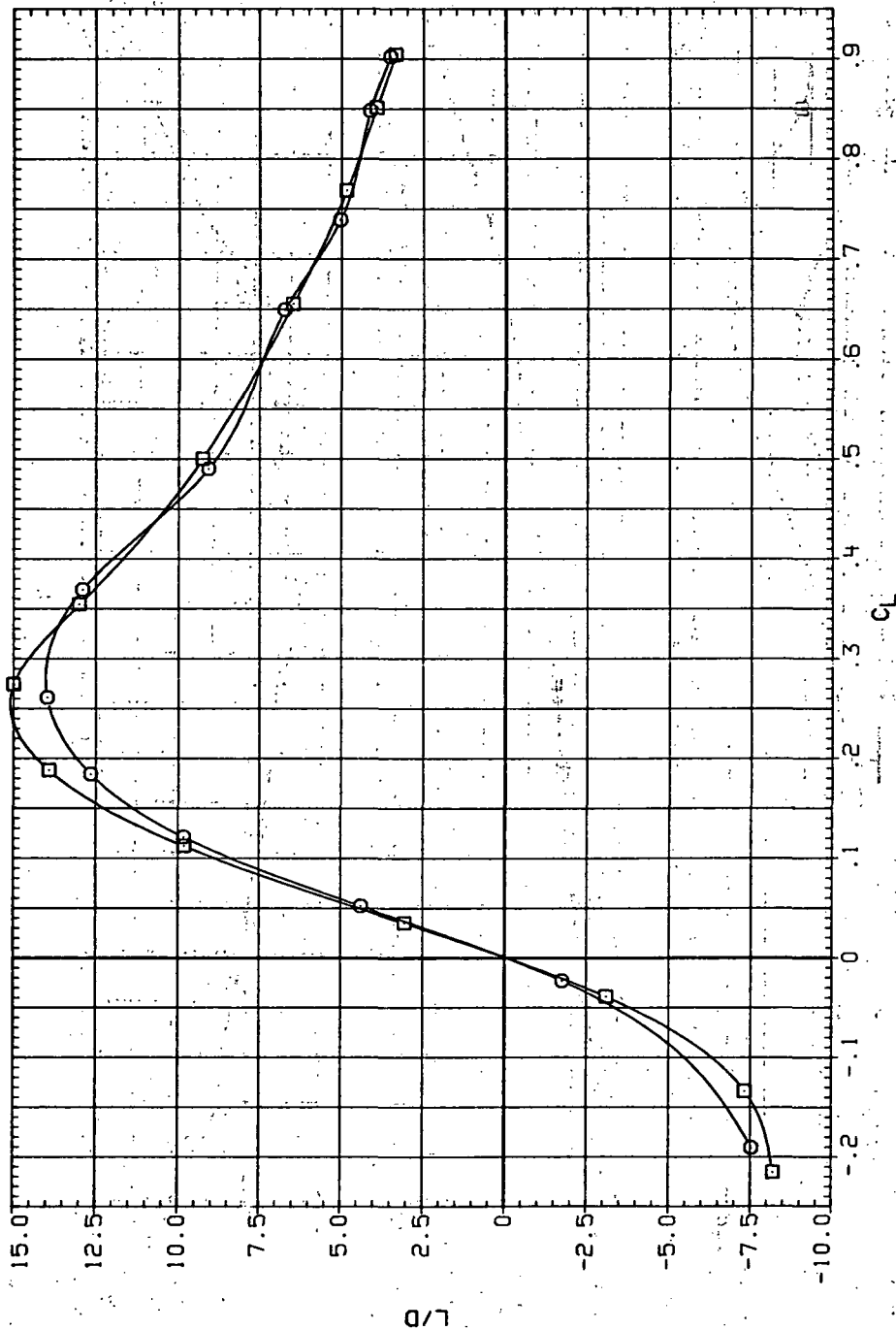


(c) C_m vs C_L .

Figure 53.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR177 ○ 74N5B (STEEL)
 RJR223 □ 74N5B (STEEL)

RM/L Q(NEM)
 5.250 15.000
 8.500 19.900

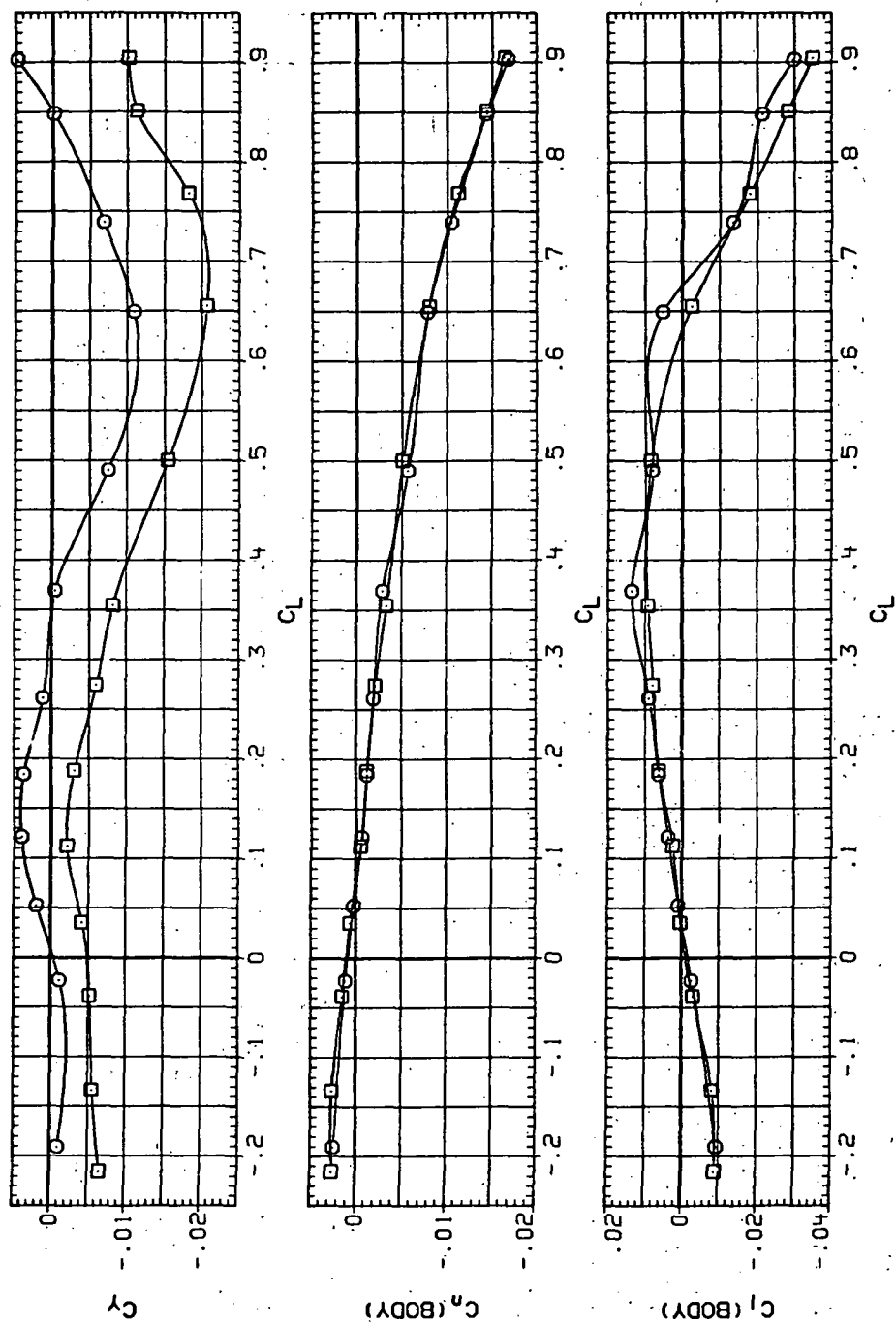


(d) L/D vs C_L .

Figure 53. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR177 74N58 (STEEL)
 RJR223 74N58 (STEEL)

RV/L Q(NSH)
 6.230 15.000
 8.200 19.900

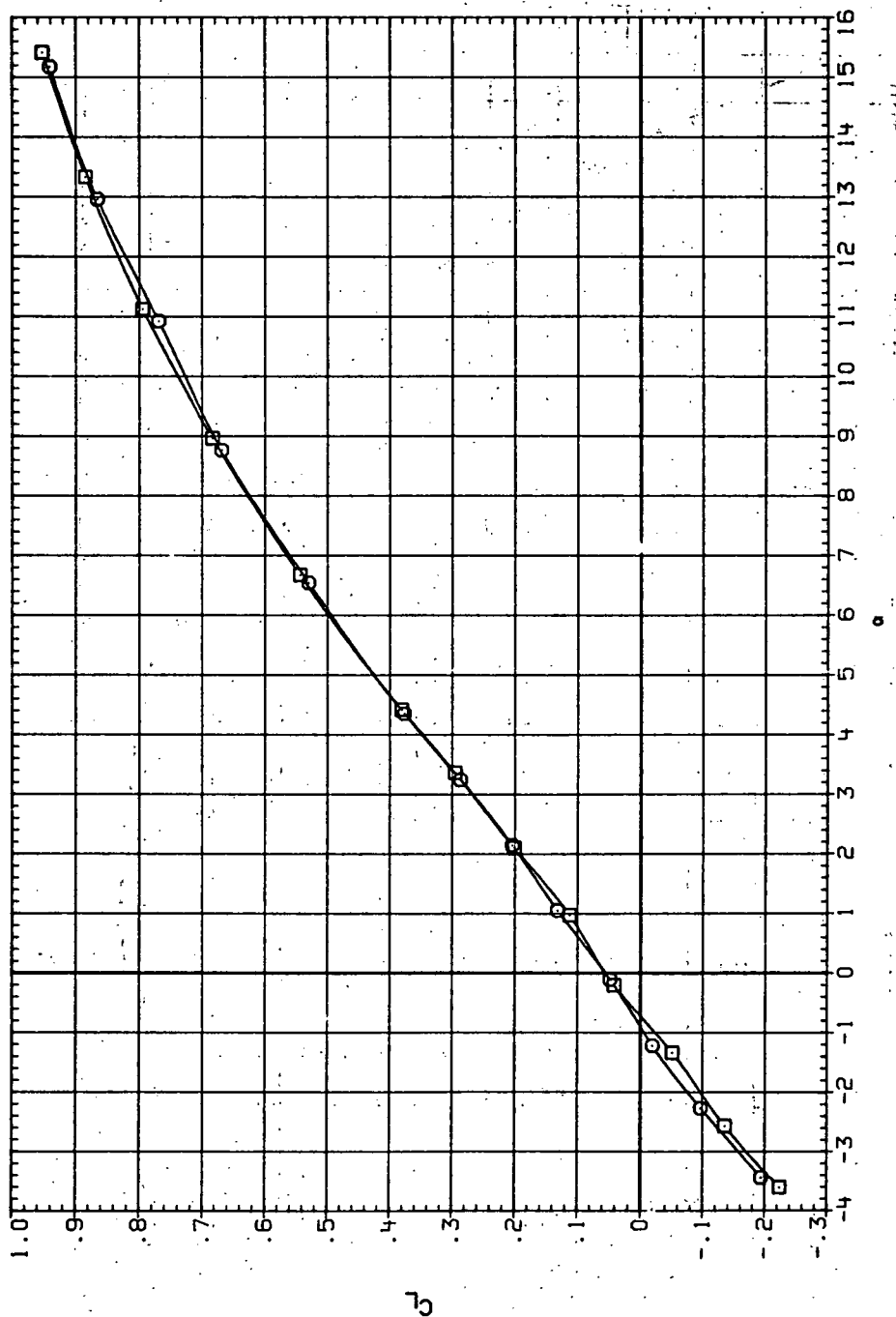


(e) C_Y , C_n and C_l vs C_L .

Figure 53. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR178 ○ 74458 (STEEL)
 RJR224 □ 74458 (STEEL)

RN/L Q(NSH)
 6.230 16.400
 8.200 21.200

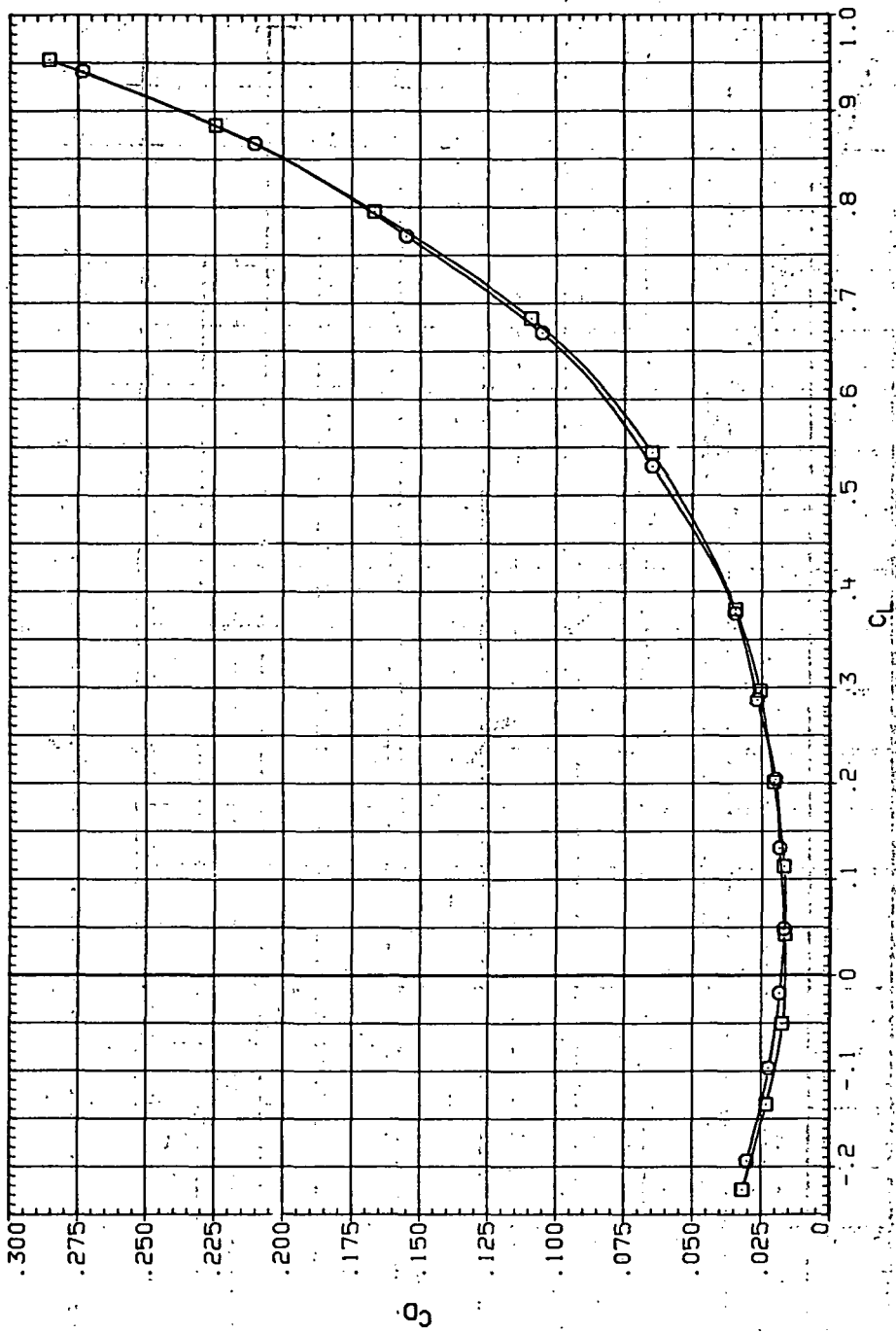


(a) C_L vs α .

Figure 54.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 1.1$ and the NACA 65A204 airfoil).

DATA SET SYMBOL: CONFIGURATION
 RJR178 74458 (STEEL)
 RJR224 74458 (STEEL)

RV/L 01(NSH)
 6.230 16.40L
 8.200 21.200

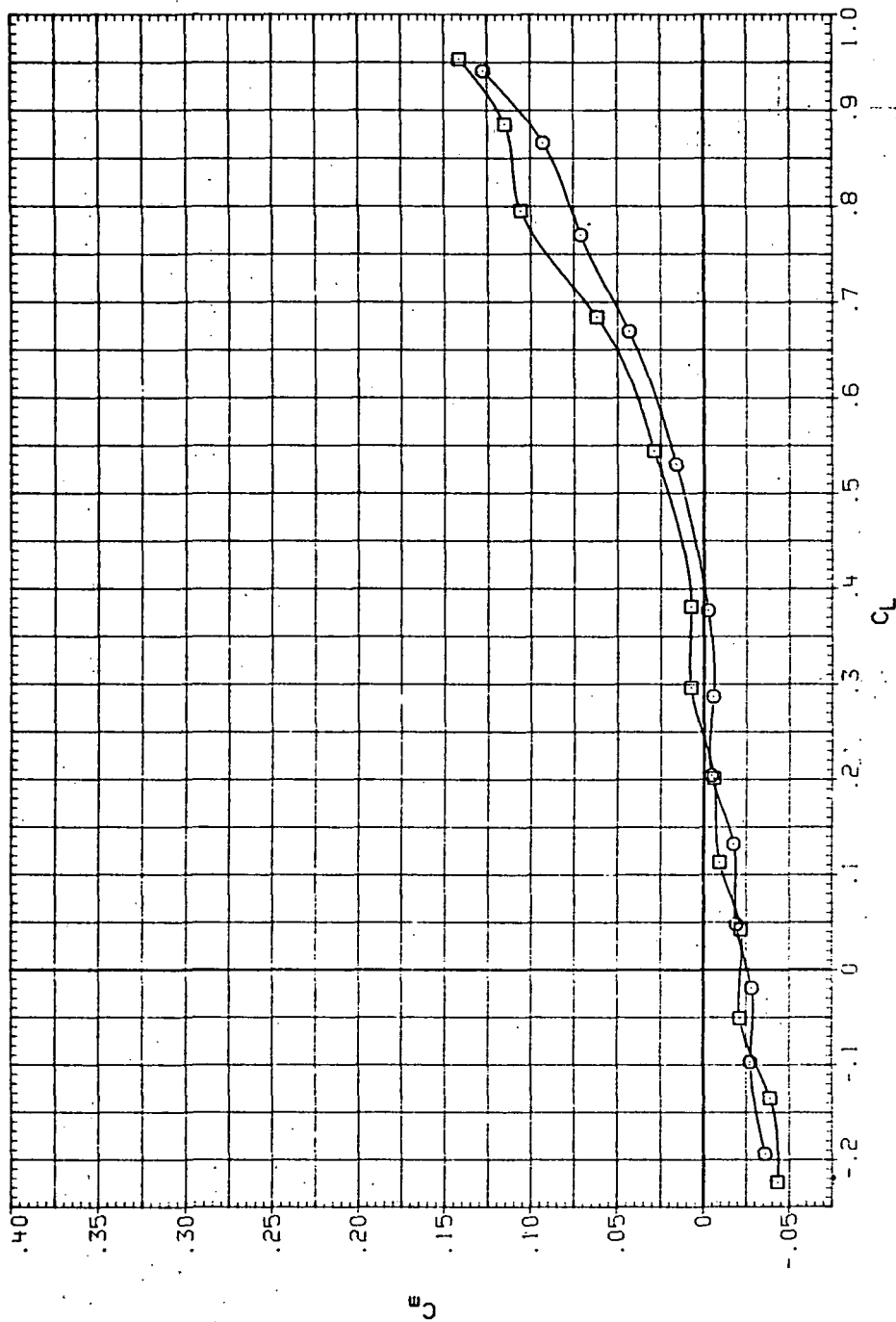


(b) C_D vs C_L .

Figure 54.- Continued.

DATA SET SYMBOL CONFIGURATION
 RUP178 $\square$ 7W45B (STEEL)
 RUP224 $\circ$ 7W45B (STEEL)

RN/L Q(NSM)
 6.230 16.400
 6.200 21.200

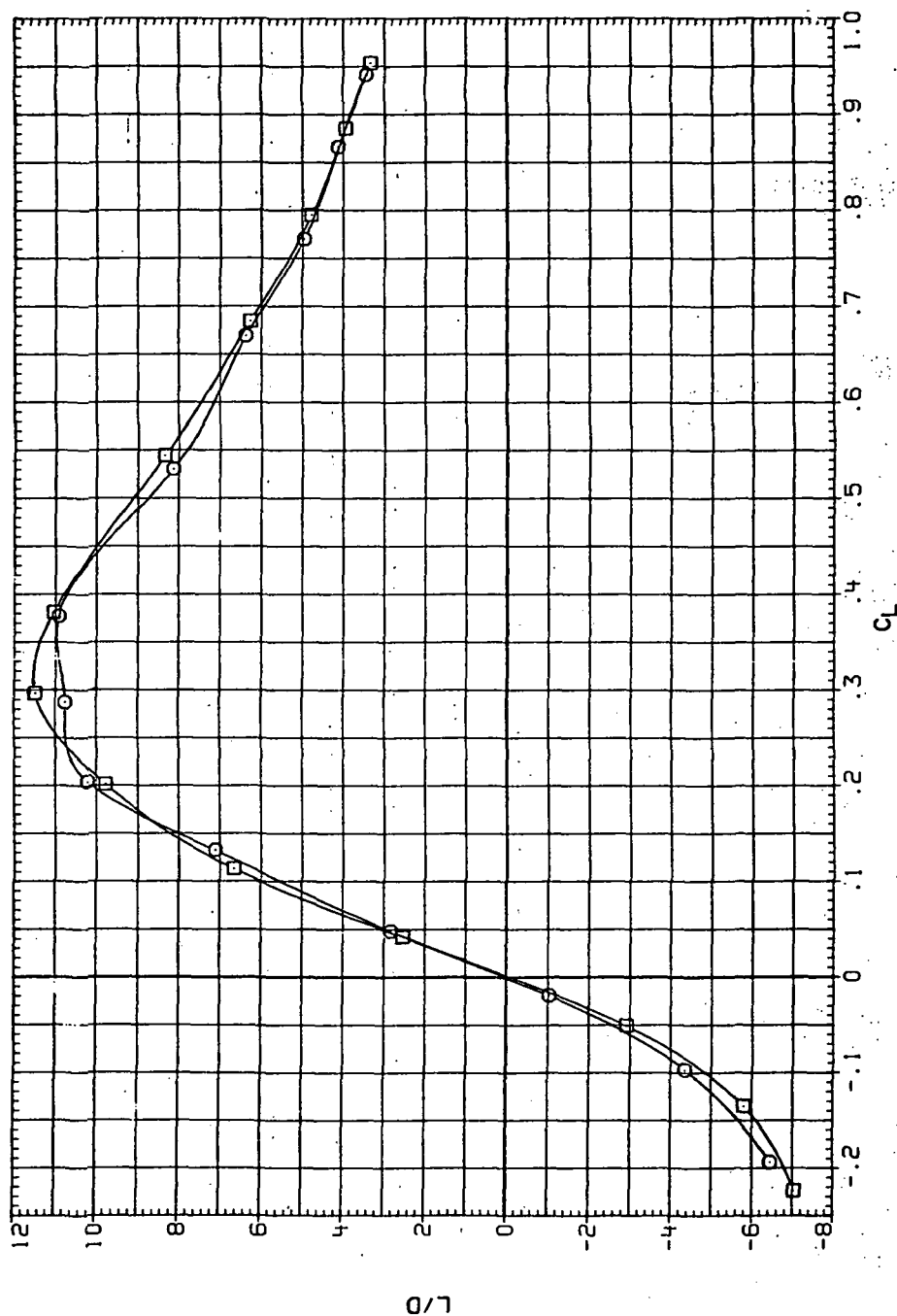


(c) C_m vs C_L .

Figure 54.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR178 ○ 74458 (STEEL)
 RJR224 □ 74458 (STEEL)

RN/L 0 (INSM)
 6.230 16.400
 8.200 21.200



(d) L/D vs C_L

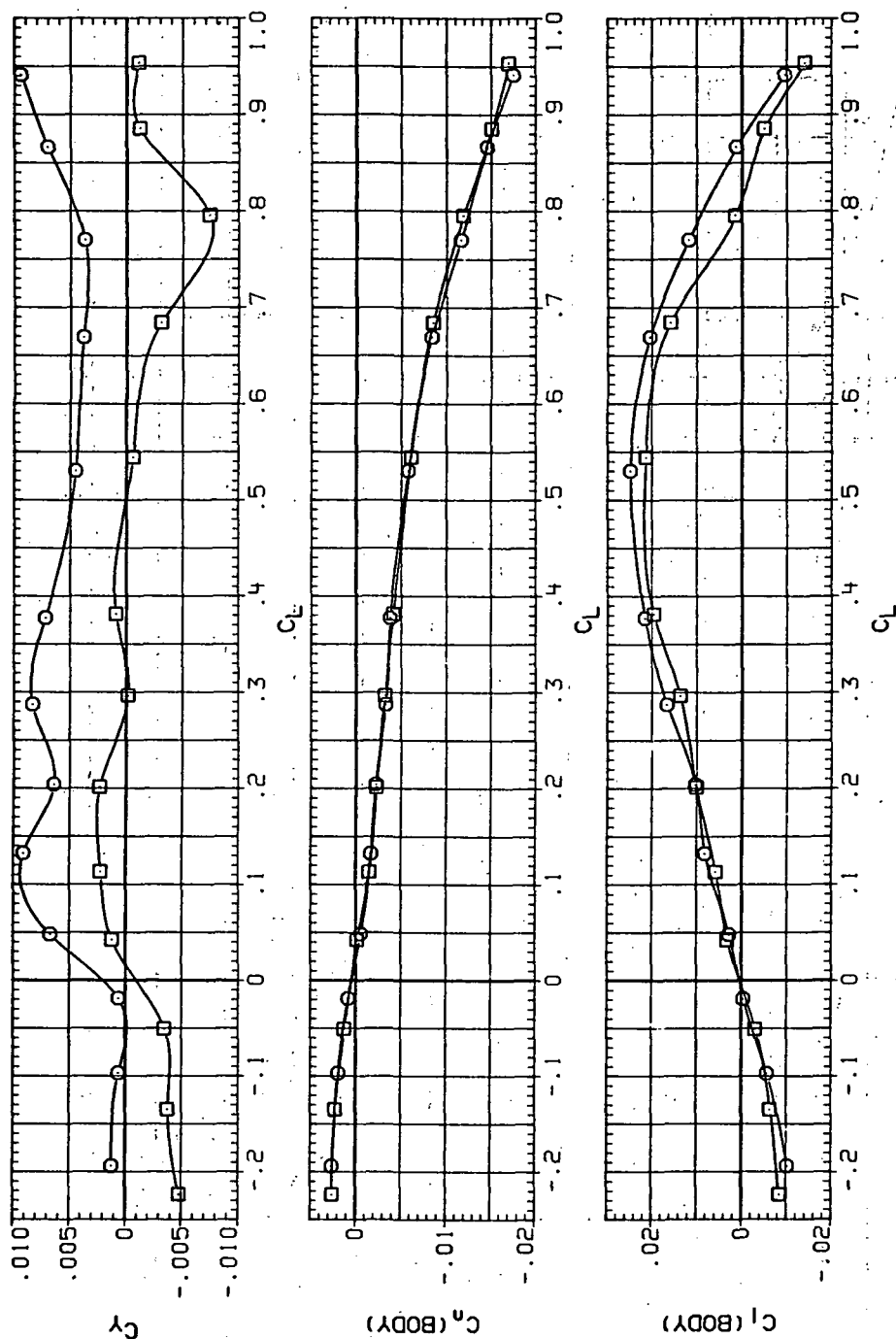
Figure 54.— Continued.

DATA SET SYMBOL
RJR178
RJR224

CONFIGURATION
7A45B (STEEL)
7A45B (STEEL)

RN/L
6.230
8.200

Q1(NSM)
16.400
21.200

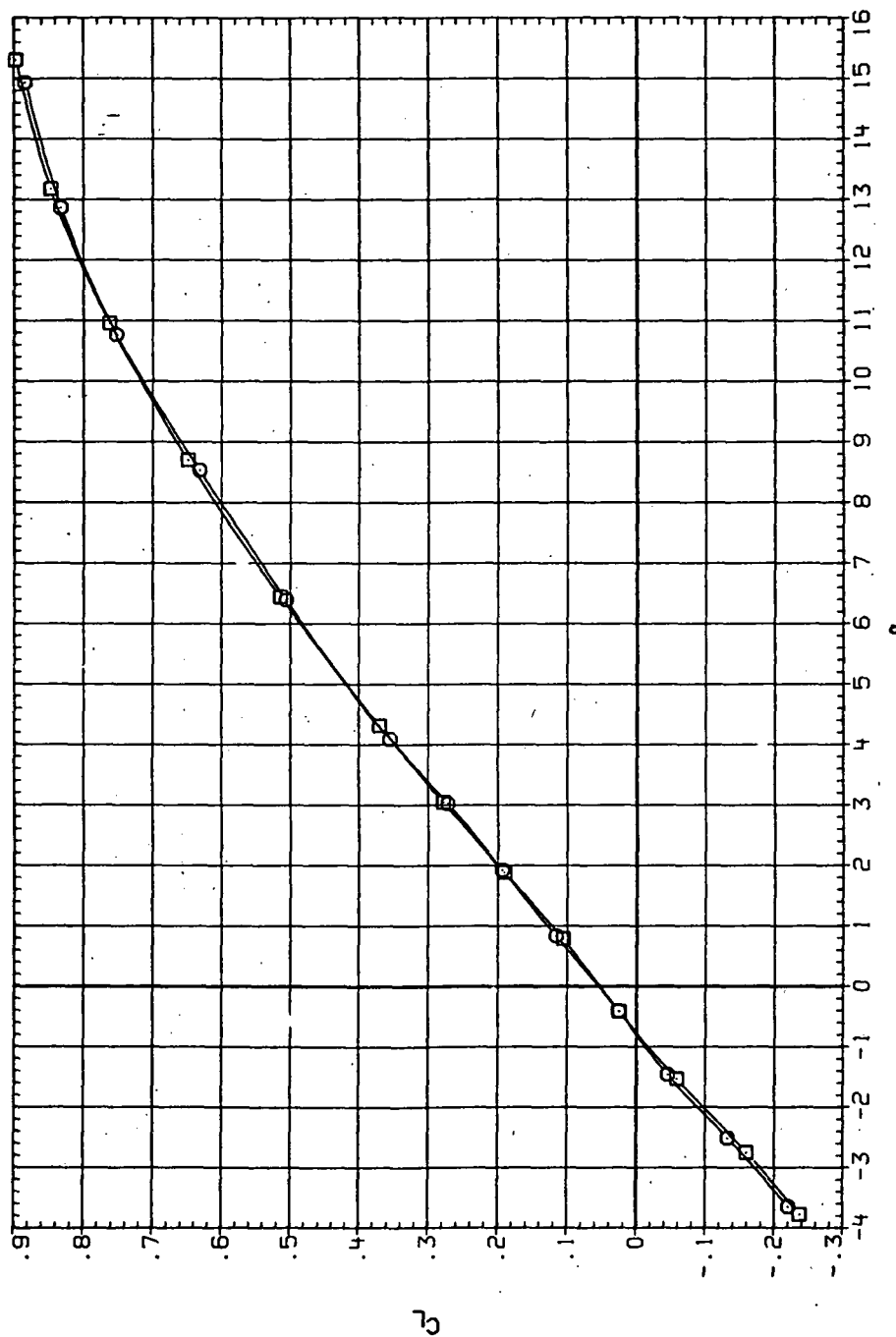


(e) C_Y , C_n and C_l vs C_L .

Figure 54. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR179 □ 7445B (STEEL)
 RJR225 □ 7445B (STEEL)

RM/L Q (NEM)
 5.230 17.000
 8.200 22.800

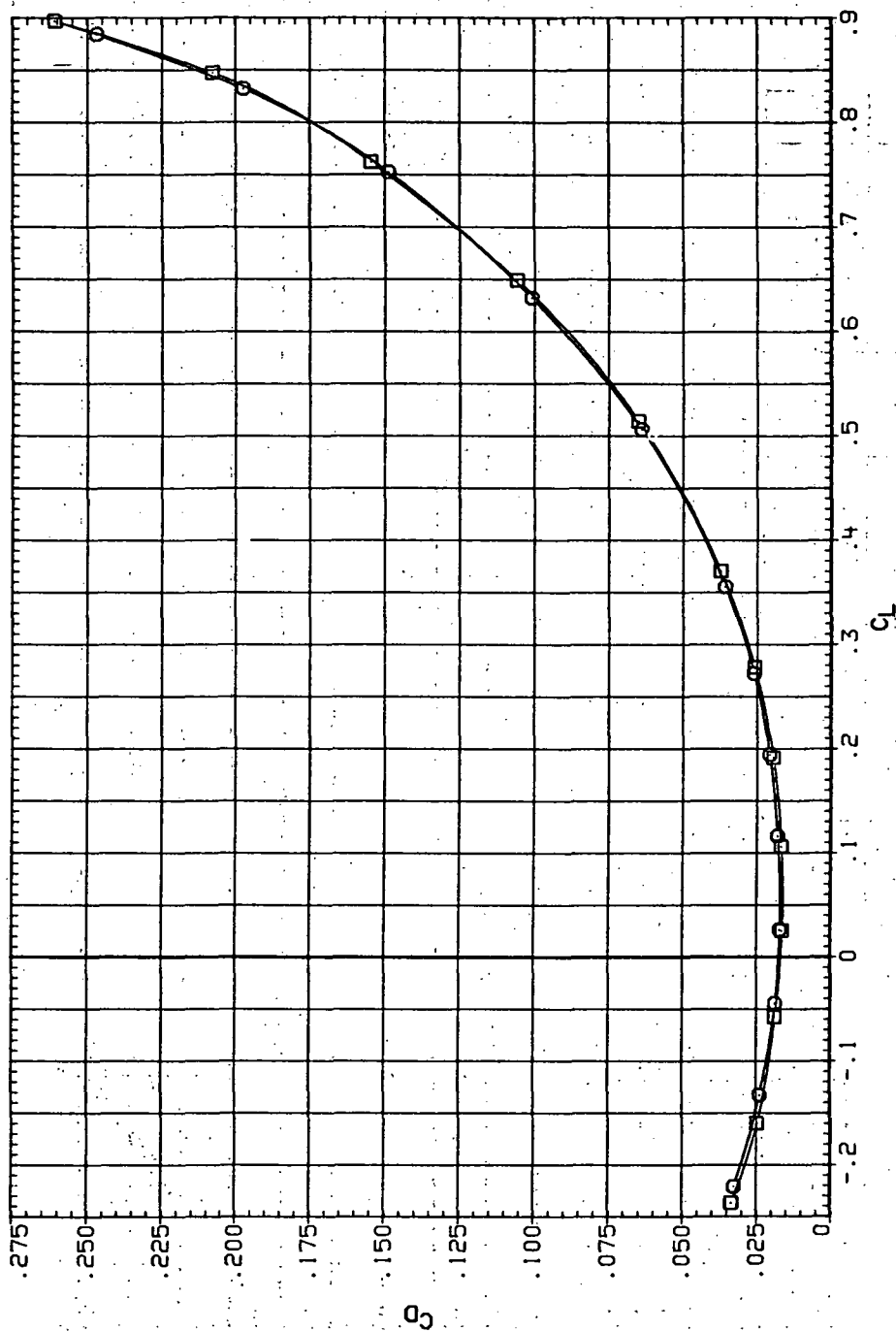


(a) C_L vs α .

Figure 55.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 1.2$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUI179 $\square$ 74A5B (STEEL)
 RUI225 $\circ$ 74A5B (STEEL)

RN/L Q(NSM)
 6.230 17.000
 8.200 22.800

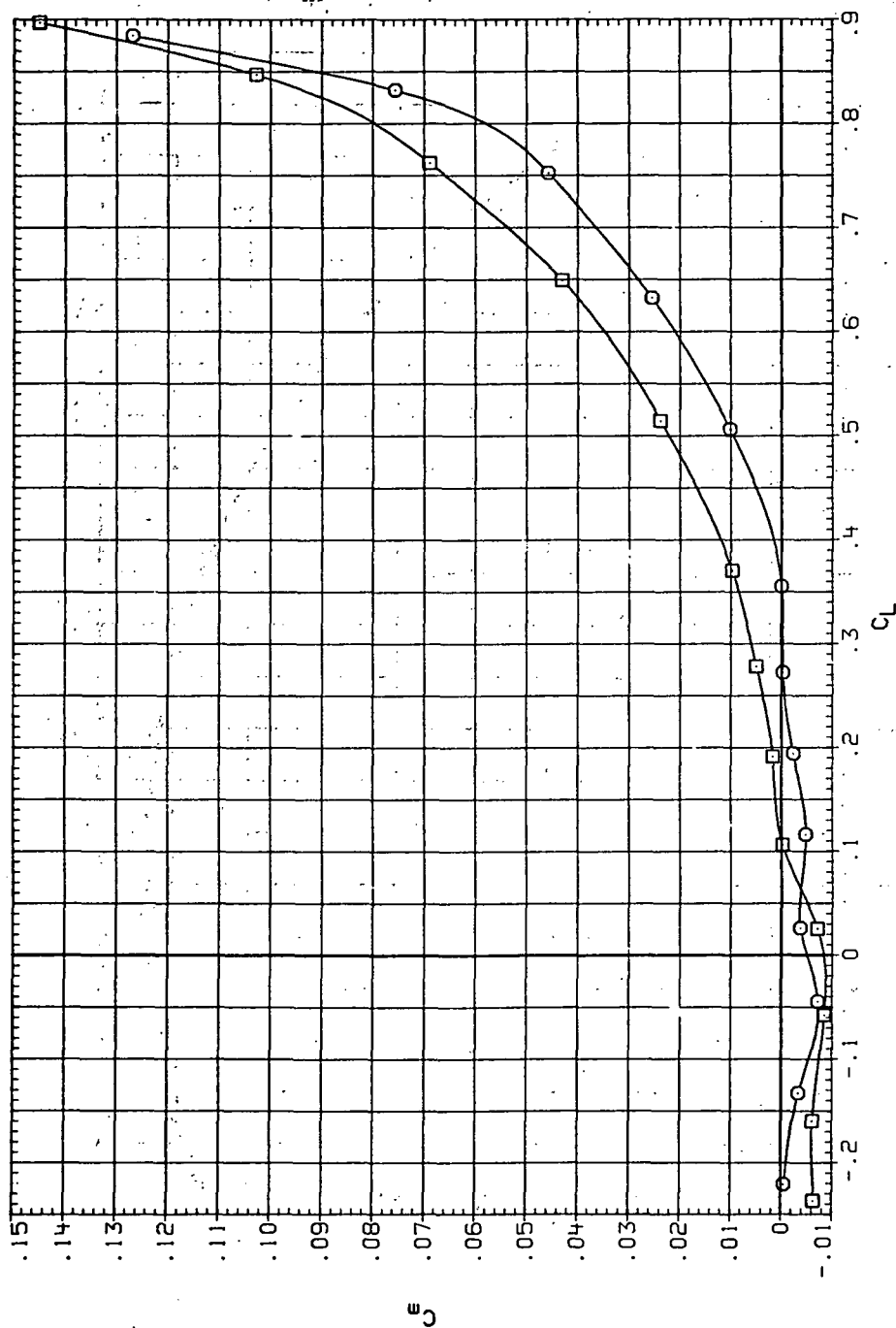


(b) C_D vs C_L .

Figure 55. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUI179 $\square$ 7445B (STEEL)
 RUI225 $\circ$ 7445B (STEEL)

RN/L Q(NSW)
 6.230 17.000
 8.200 22.800

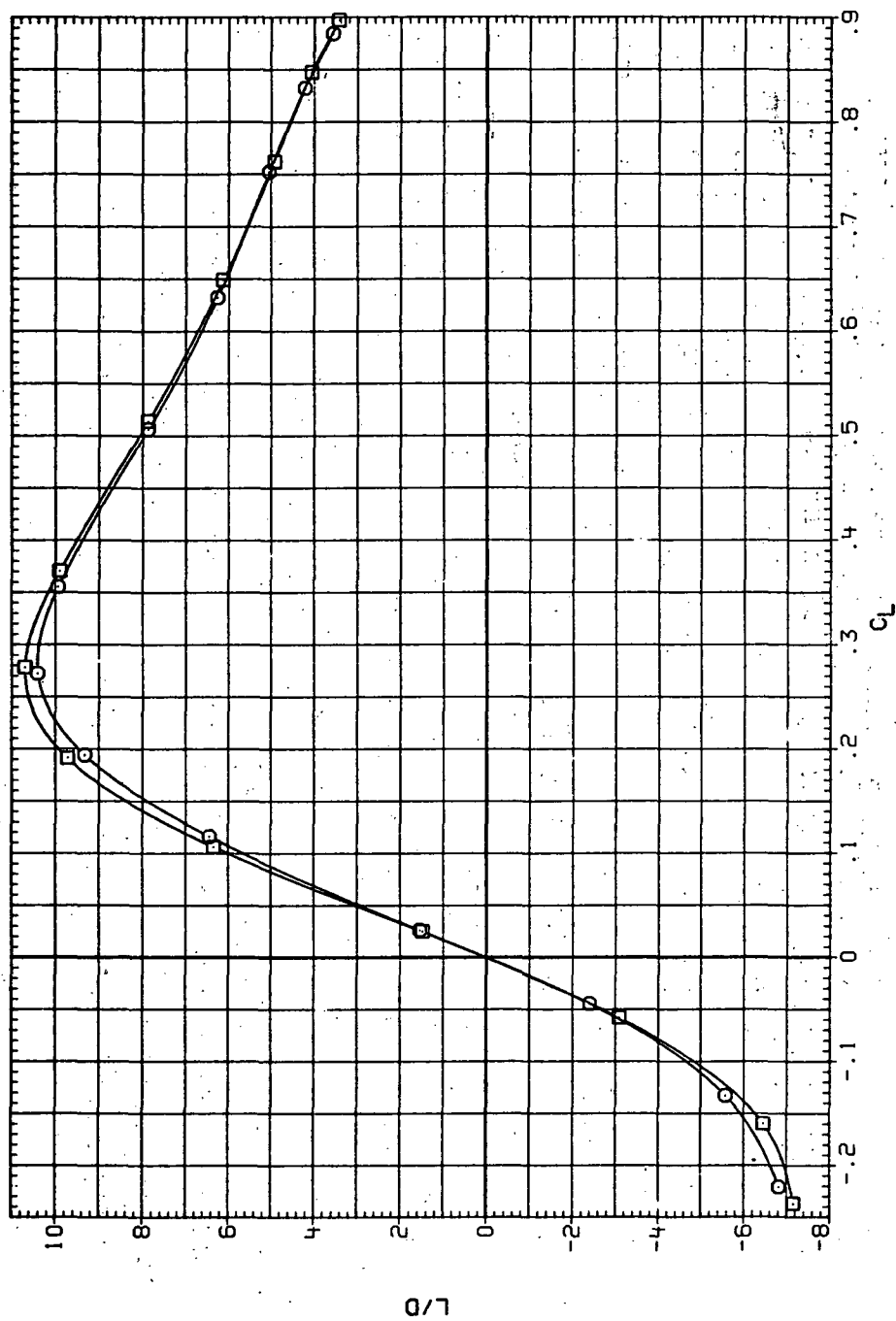


(c) C_m vs C_L .

Figure 55.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR179 ○ 7M58 (STEEL)
 RJR225 □ 7M58 (STEEL)

RN/L Q(NSH)
 6.230 17.000
 8.200 22.800

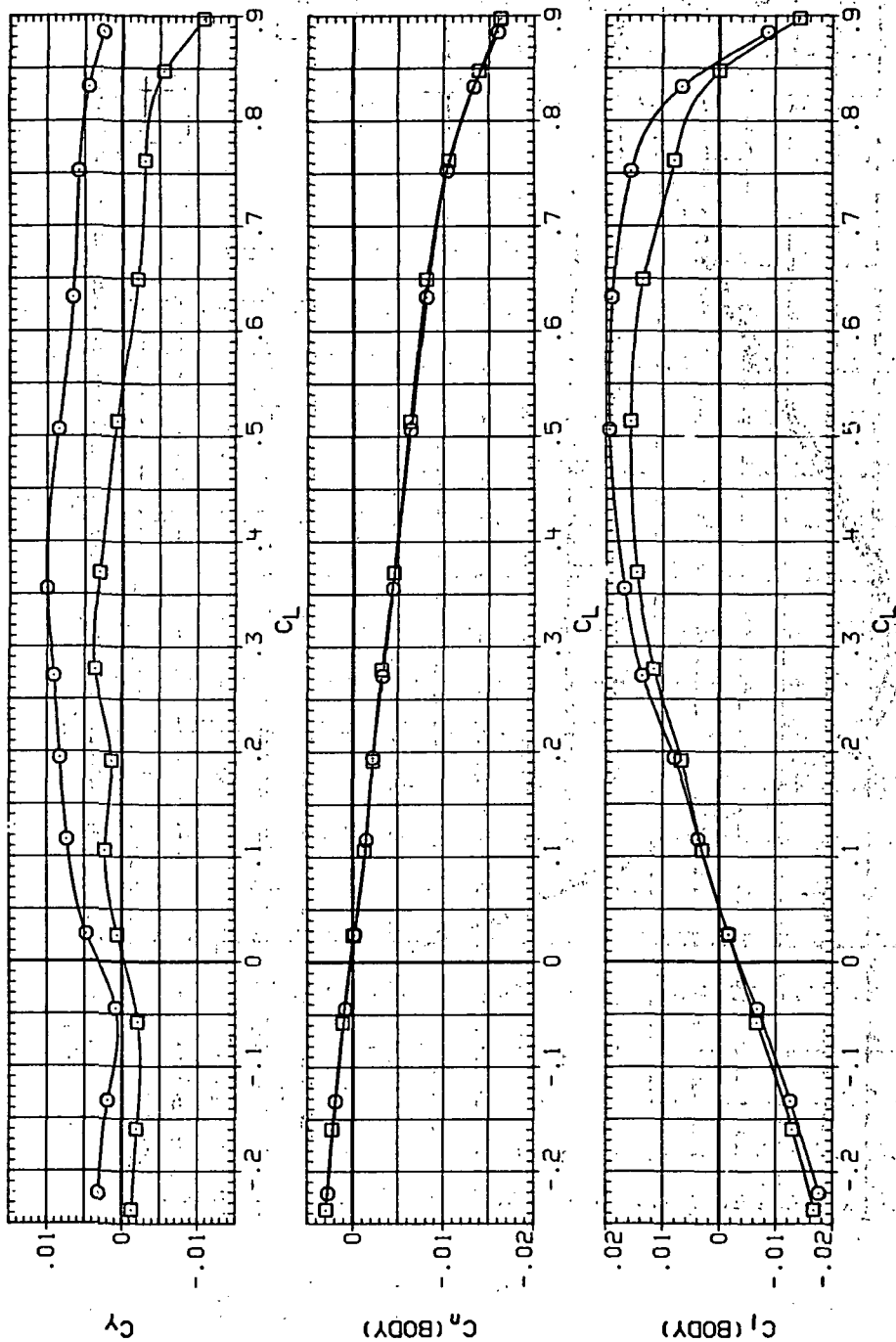


(d) L/D vs C_L .

Figure 55.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR179 7N45B (STEEL)
 RJR225 7N45B (STEEL)

RN/L Q (NSM)
 6.230 17,000
 8.200 22,800

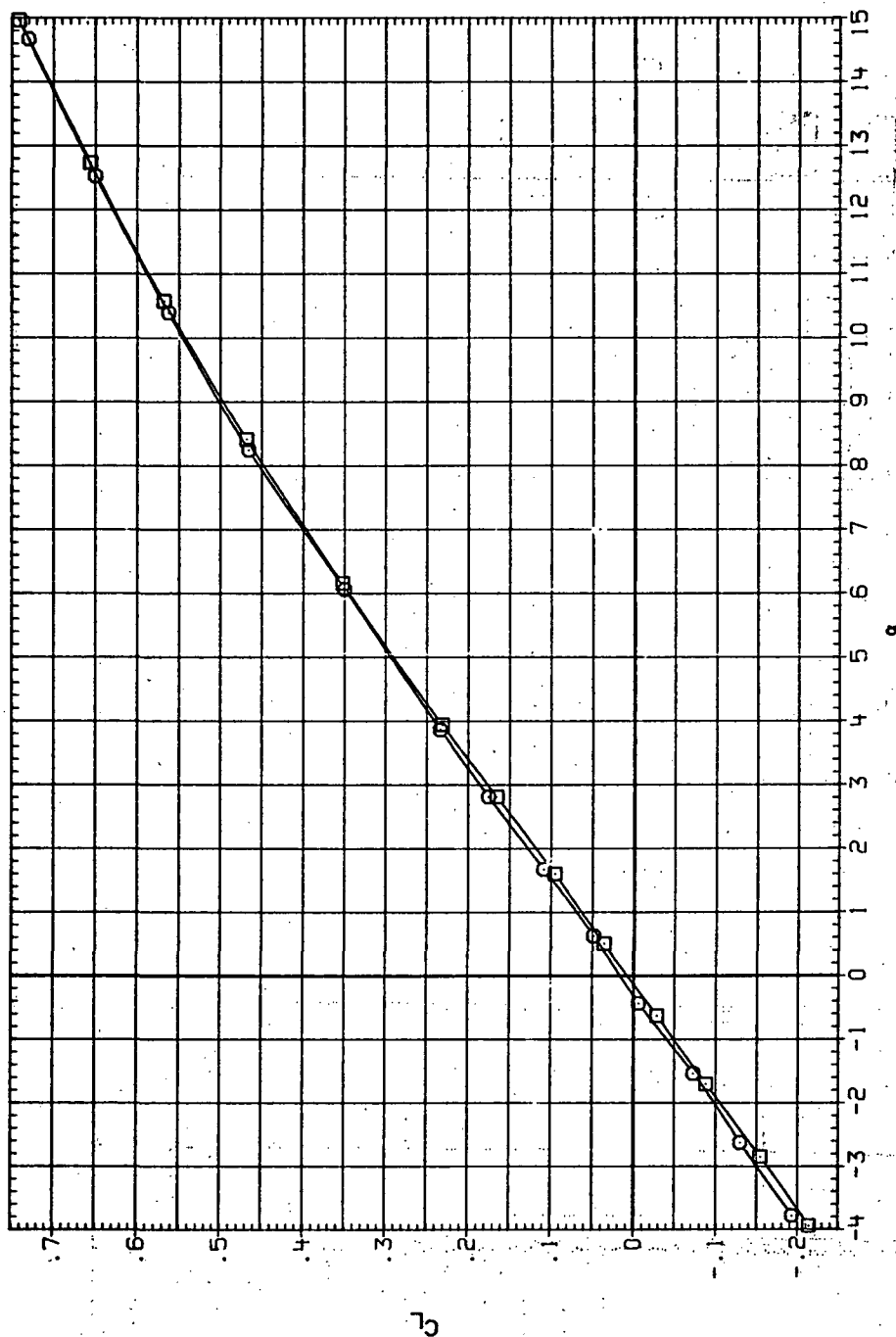


(e) C_Y , C_n and C_l vs C_L .

Figure 55.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR180 $\square$ 74°58 (STEEL)
 RJR226 $\square$ 74°58 (STEEL)

RN/L Q(NSM)
 8.230 18.800
 8.200 24.400

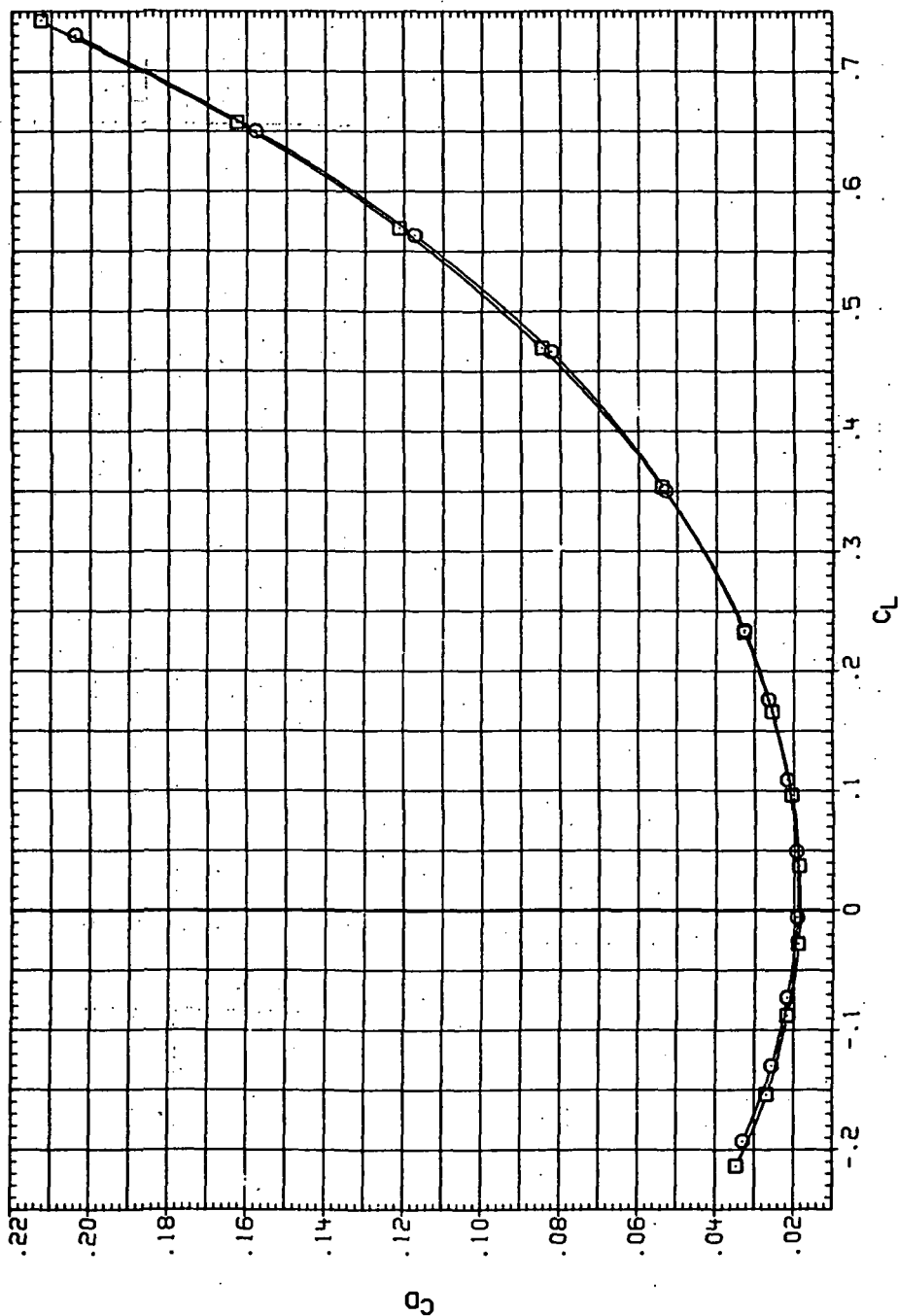


(a) C_L vs α .

Figure 56.—Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 1.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR180 7/4x58 (STEEL)
 RJR226 7/4x58 (STEEL)

RM/L Q (INCH)
 6.230 18.500
 8.200 24.400

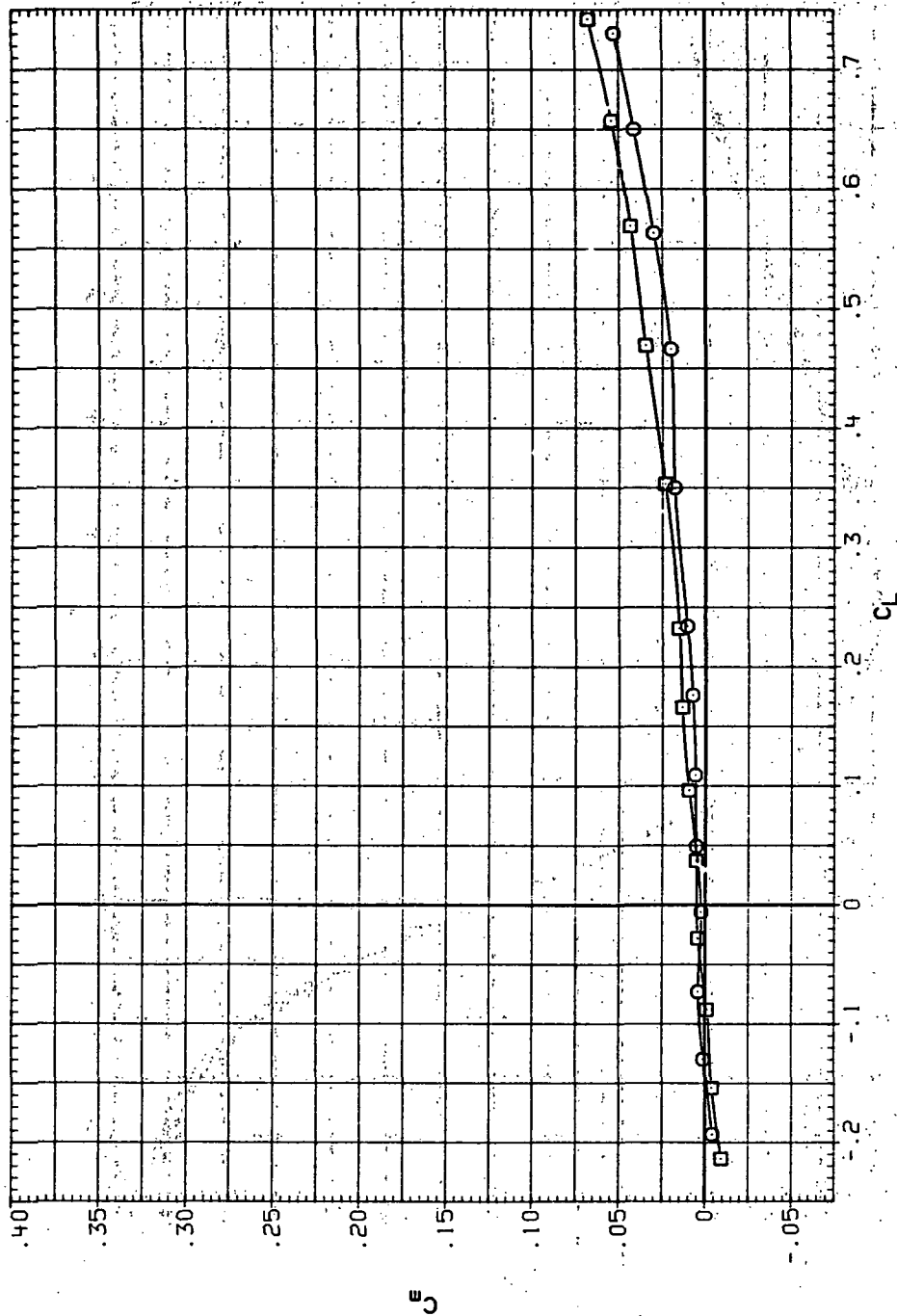


(b) C_D vs C_L .

Figure 56.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR180 ○ 7445B (STEEL)
 RJR225 □ 7445B (STEEL)

RV/L Q(NSM)
 6.230 18,600
 8.200 24,400

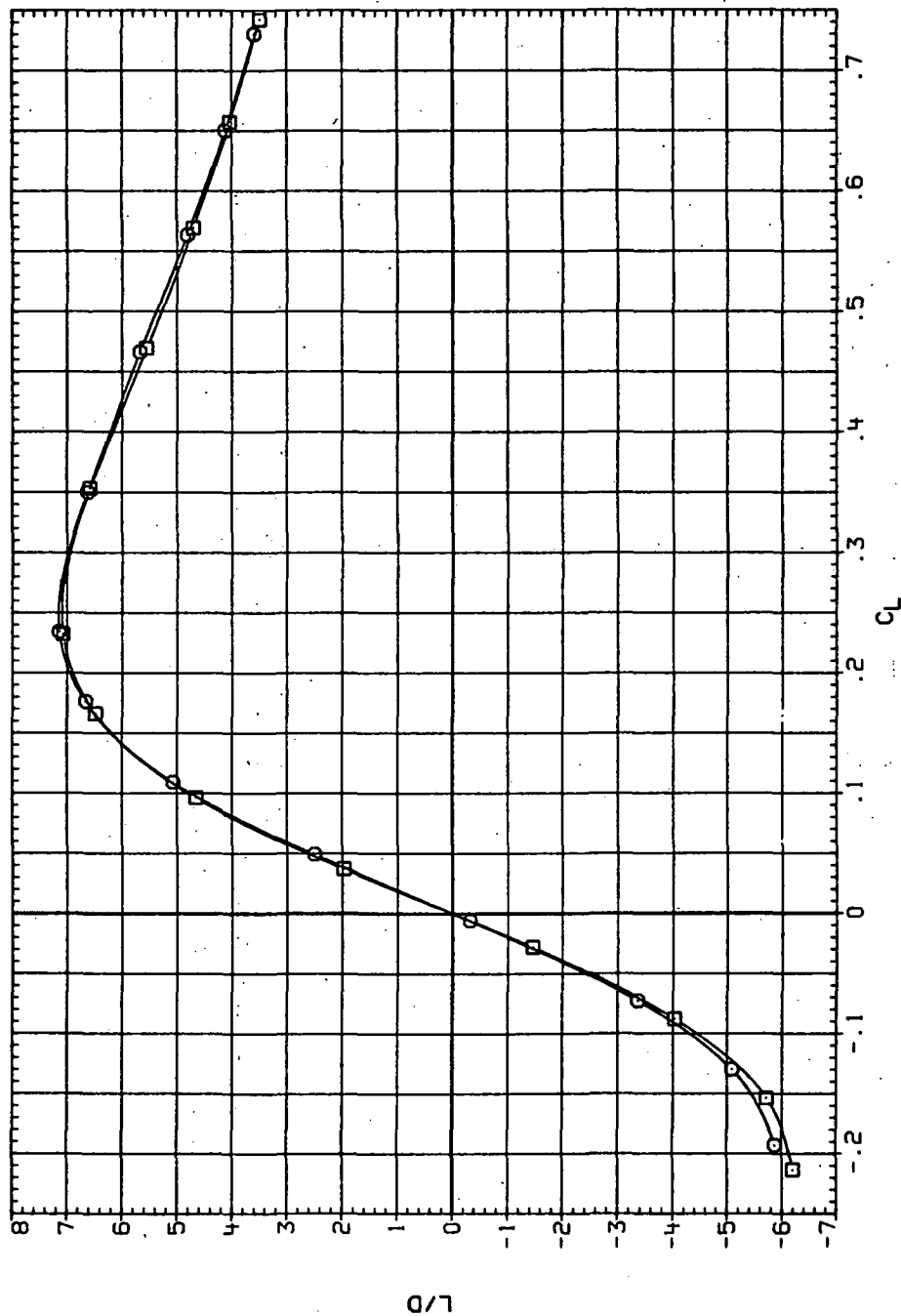


(c) C_m vs C_L

Figure 56. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR180 74458 (STEEL)
 RJR226 74458 (STEEL)

RN/L Q (NEM)
 6.230 18.600
 8.200 24.400

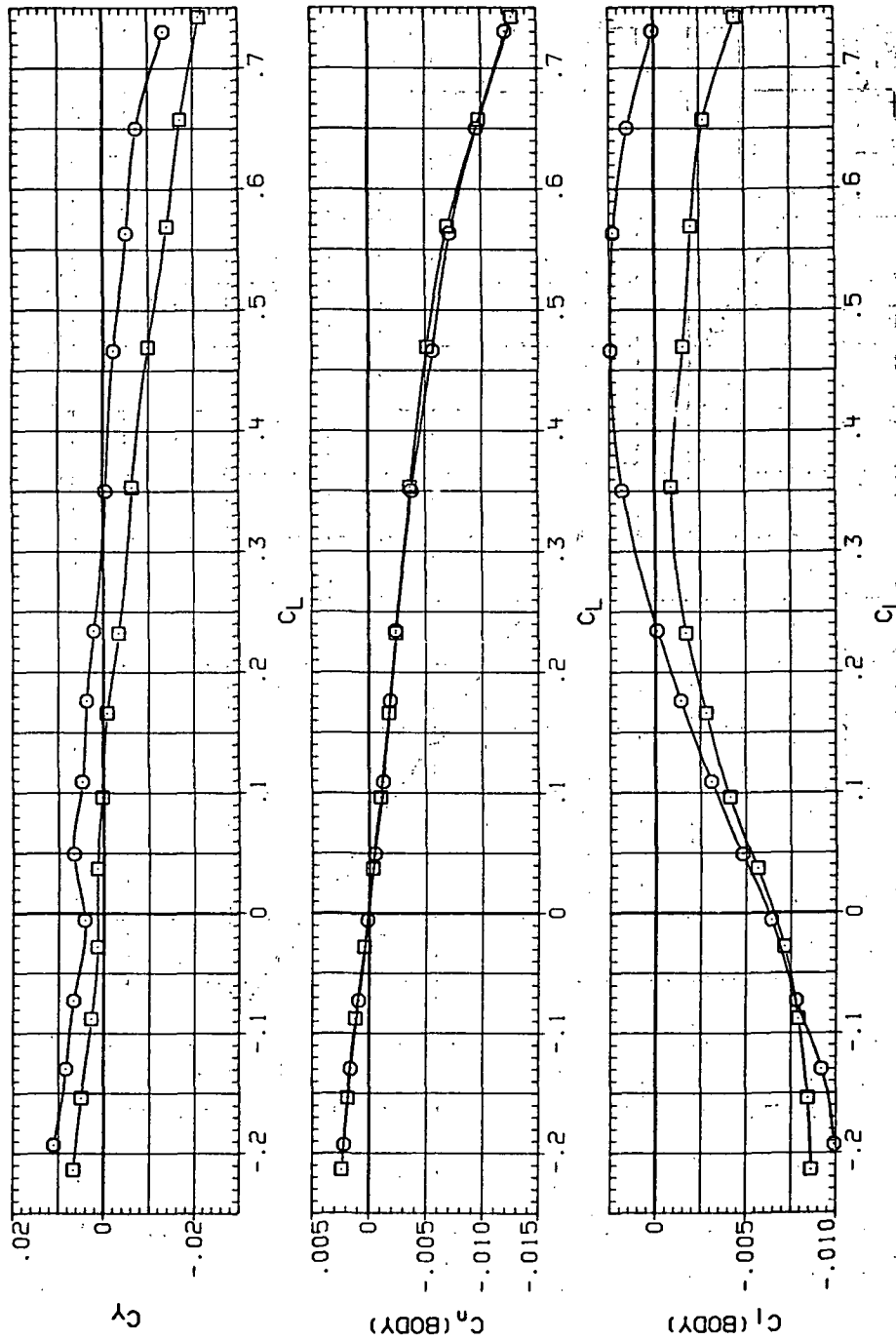


(d) L/D vs C_L

Figure 56.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR180 7445B (STEEL)
 RJR226 7445B (STEEL)

RV/L Q (INSH)
 6.230 18.600
 8.200 24.400

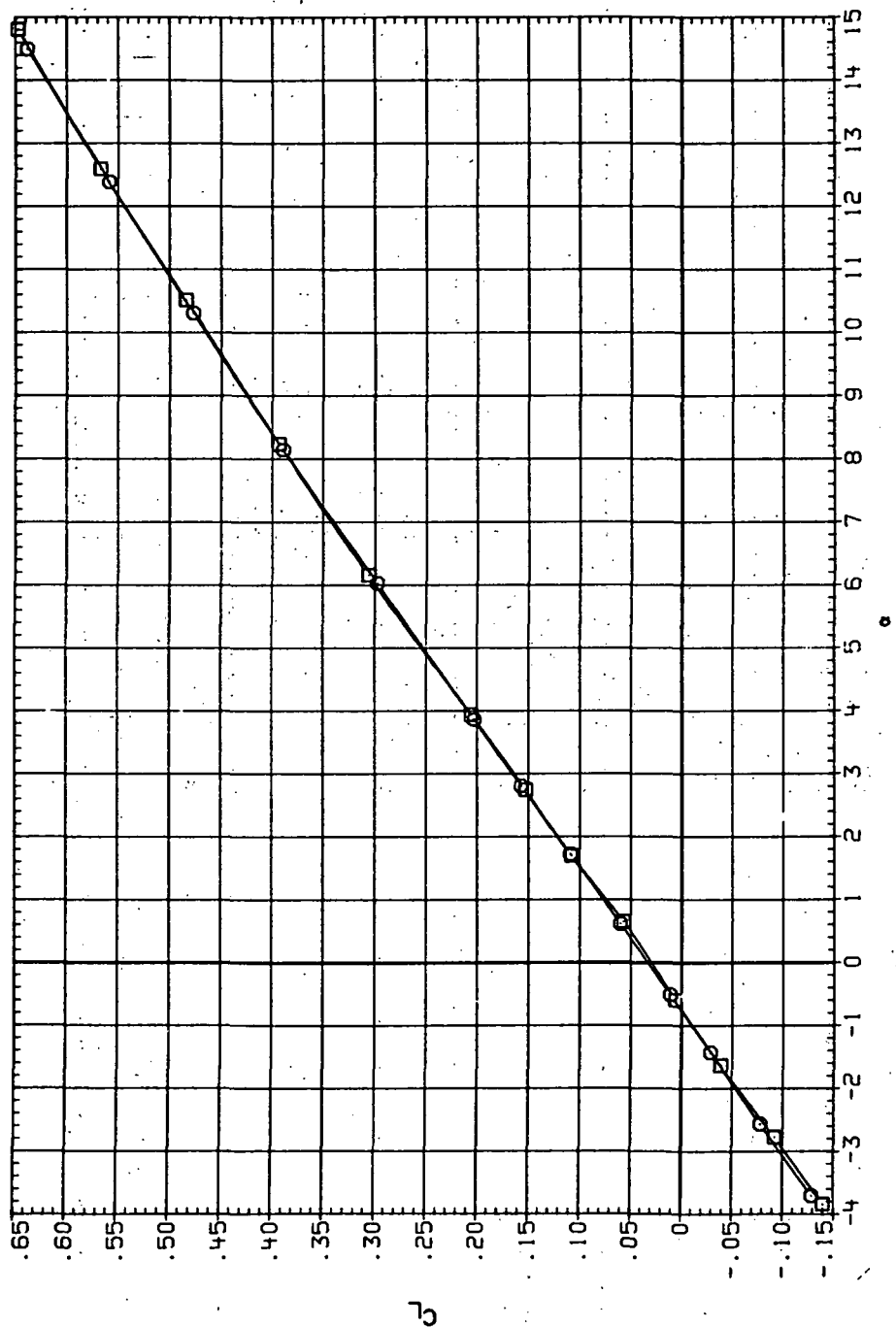


(e) C_Y , C_n and C_l vs C_L .

Figure 56.— Concluded.

DATA SET SYMBOL CONFIGURATION
 R/R(18) 7/4/58 (STEEL)
 R/R(227) 7/4/58 (STEEL)

RN/L 0 (NSH)
 6.230 18.500
 6.200 24.700

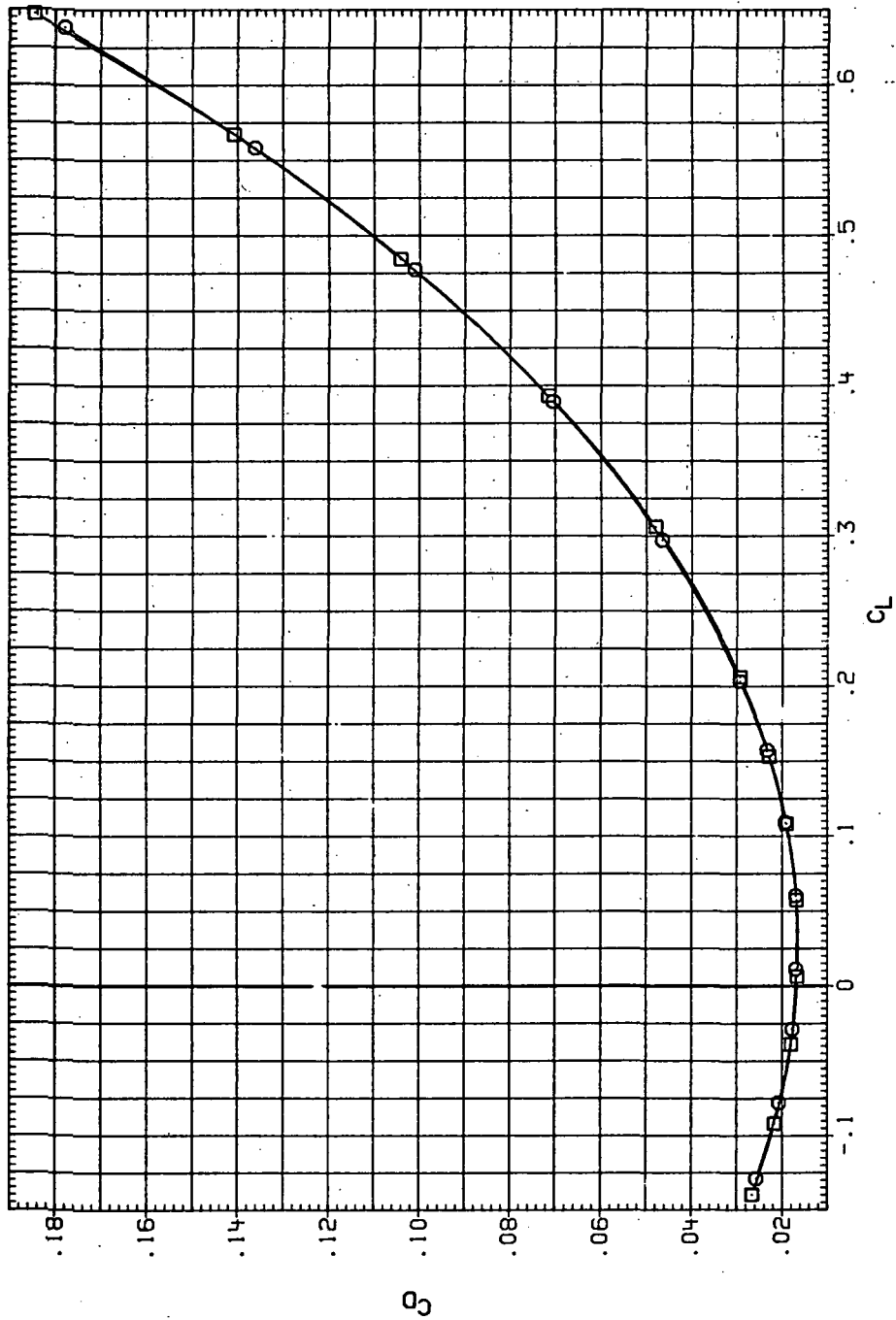


(a) C_L vs α .

Figure 57.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 45^\circ$, $M = 2.0$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R/R181 7445B (STEEL)
 R/R227 7445B (STEEL)

RN/L Q(NSH)
 6.230 18.500
 8.200 24.700

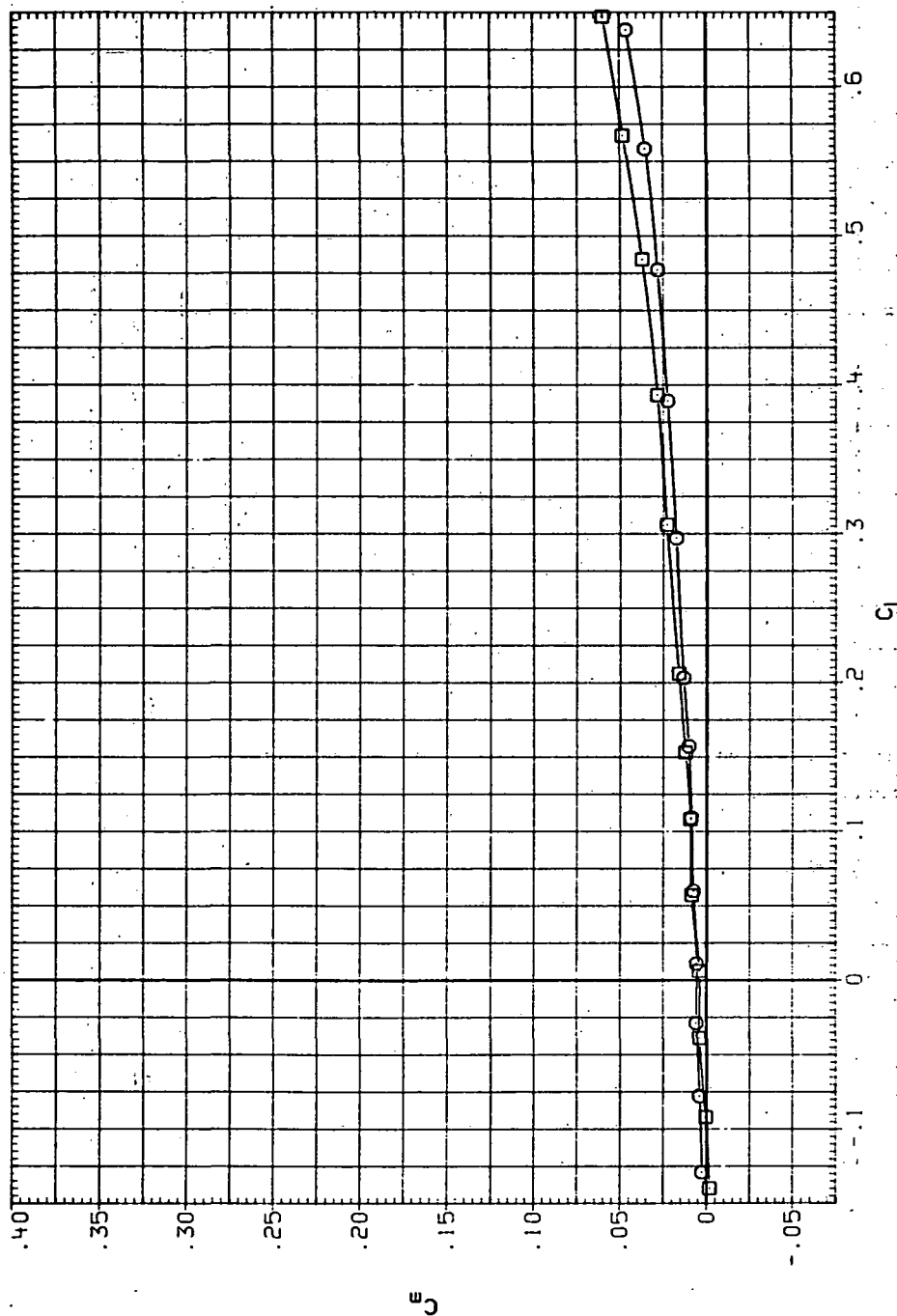


(b) C_D vs C_L .

Figure 57.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR181 □ 7445B (STEEL)
 RJR227 □ 7445B (STEEL)

RN/L Q(NSM)
 6.230 18.500
 8.200 24.700

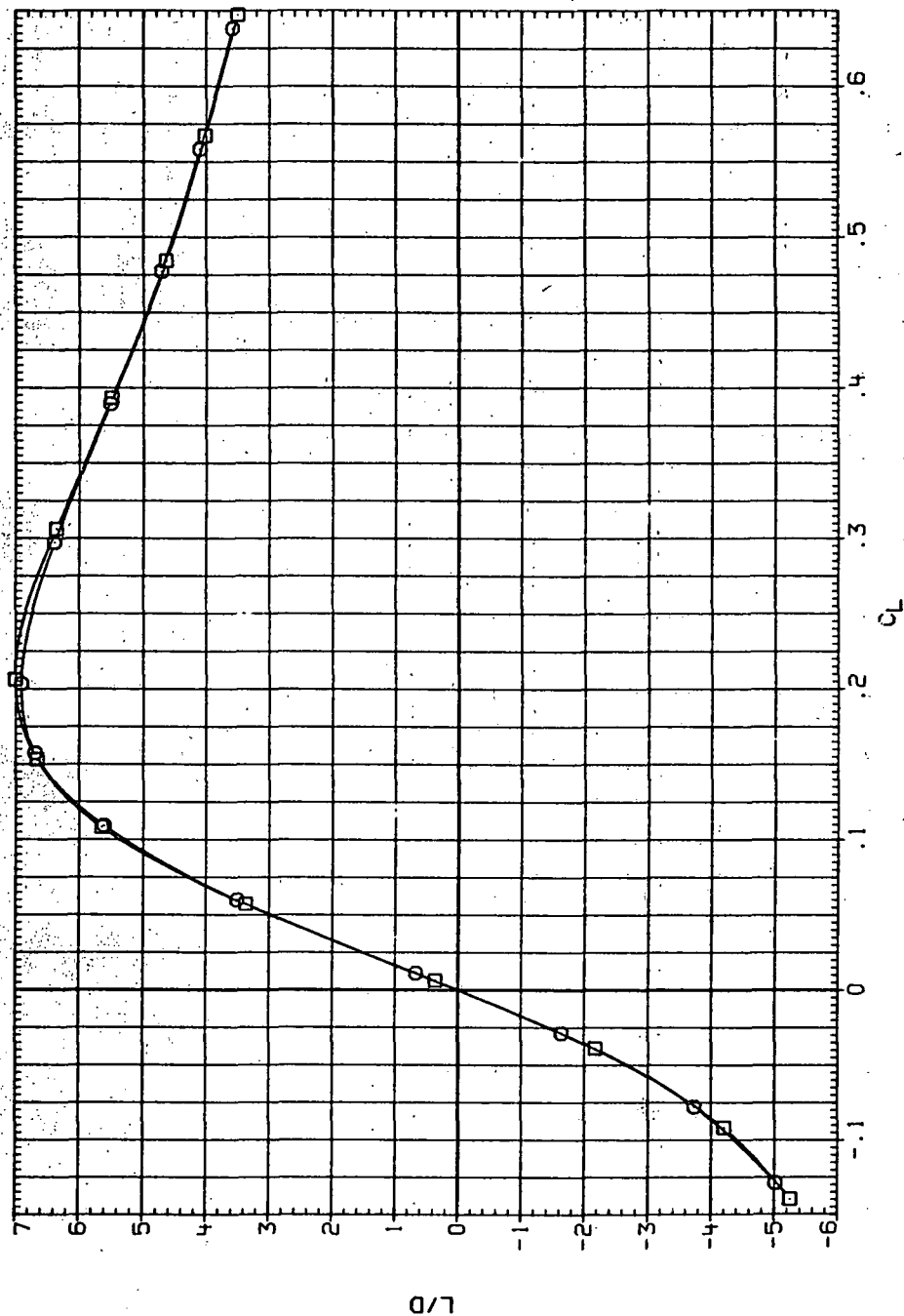


(c) C_m vs C_L

Figure 57.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR181 ○ 7445B (STEEL)
 RJR227 □ 7445B (STEEL)

RN/L Q1(NSM)
 6.250 18.500
 8.200 24.700

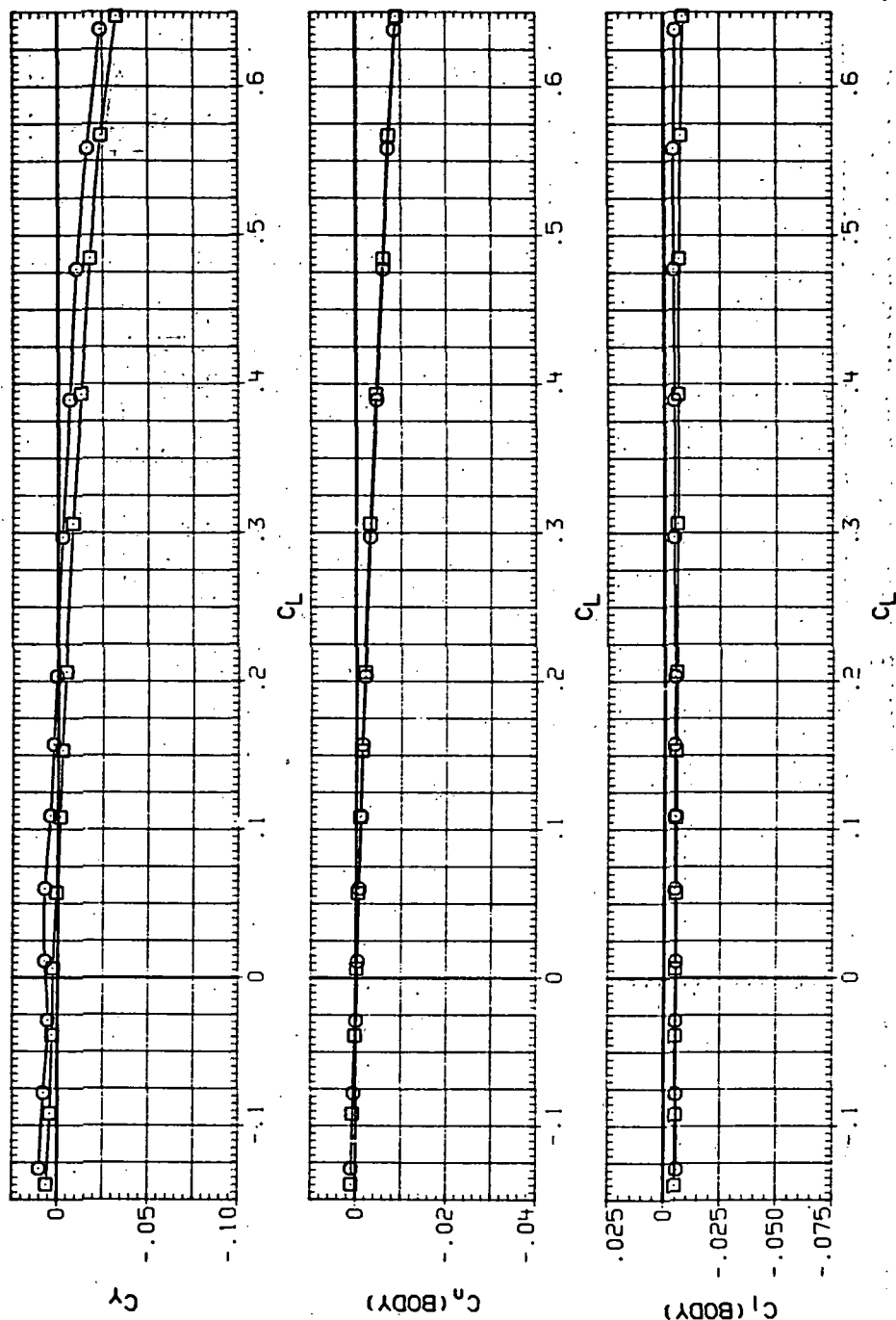


(d) L/D vs C_L .

Figure 57.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR181 7445B (STEEL)
 RJR227 7445B (STEEL)

RV/L Q(NSH)
 6.230 18,500
 8.200 24,700



(e) C_Y , C_n and C_l vs C_L .

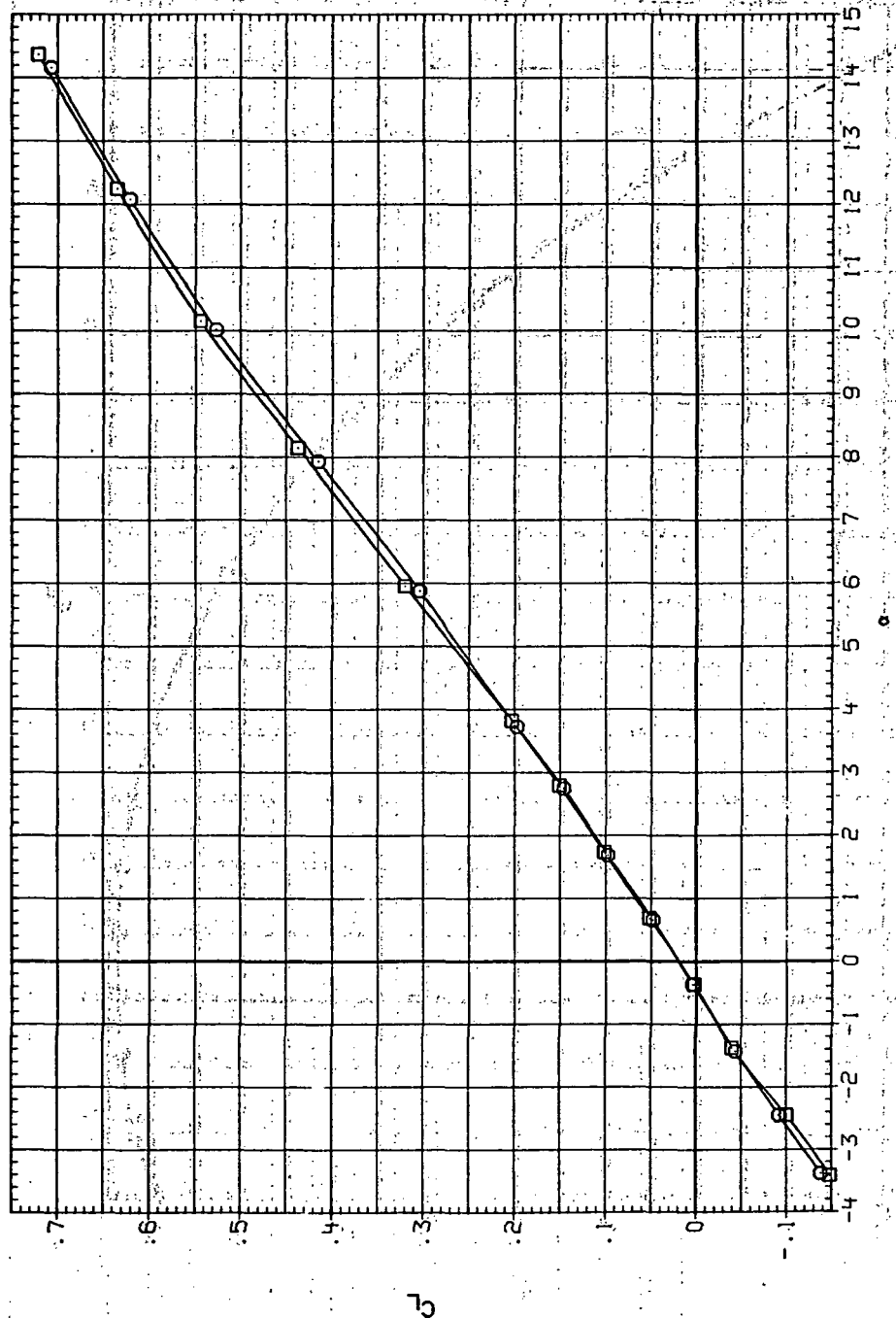
Figure 57.— Concluded.

DATA SET SYMBOL
RJR183
RJR229

CONFIGURATION
7450B (STEEL)
7450B (STEEL)

RN/L
6.230
3.200

Q (INCH)
7.480
9.900

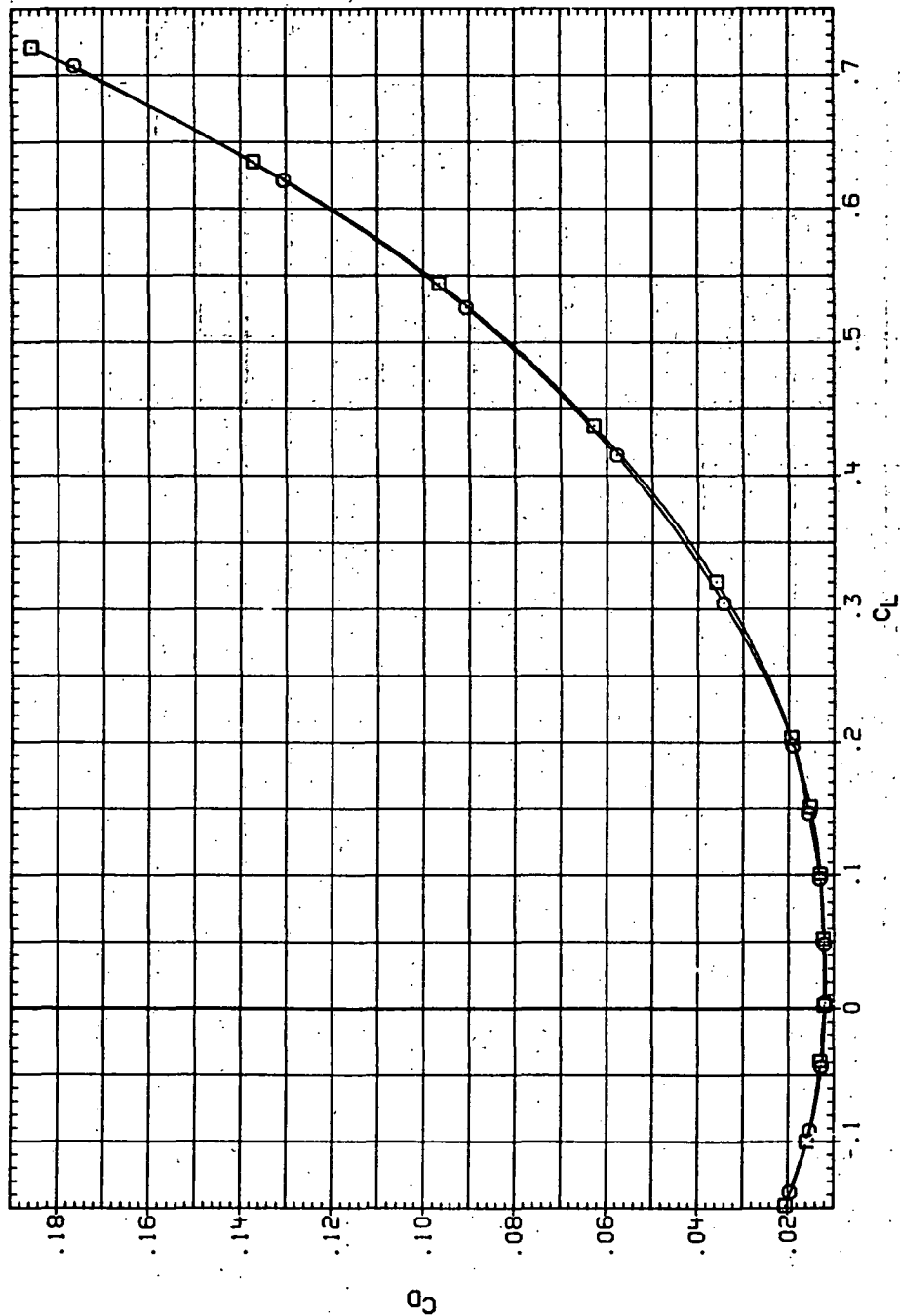


(a) C_L vs α .

Figure 58.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.4$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR183 74508 (STEEL)
 RJR229 74508 (STEEL)

RN/L Q(NSH)
 6.230 7.980
 8.200 9.900

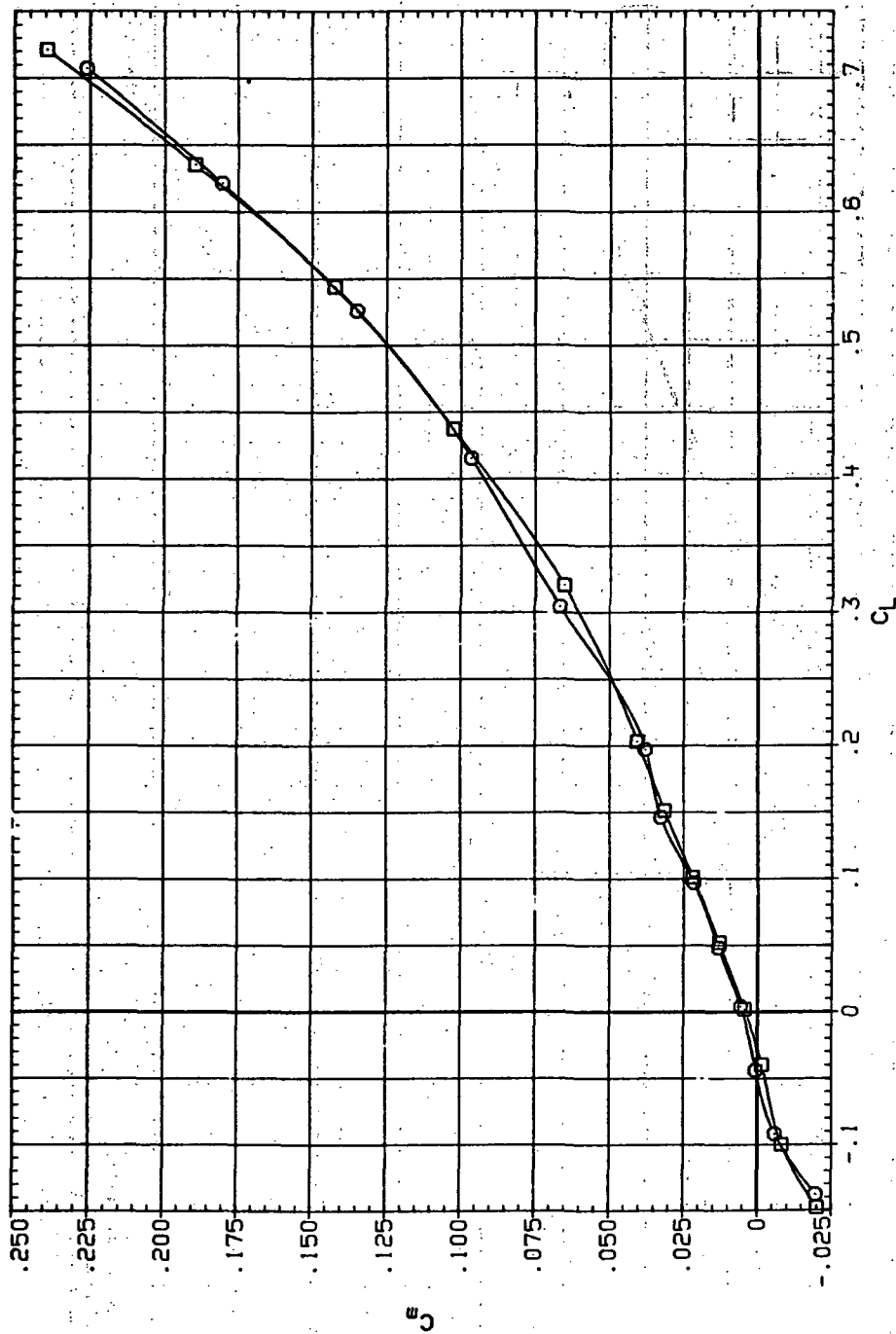


(b) C_D vs C_L .

Figure 58.— Continued.

DATA SET SYMBOL CONF (GURATION)
 R1183 74508 (STEEL)
 R1223 74508 (STEEL)

RV/L Q(NSH)
 6.230 480
 8.200 9.900

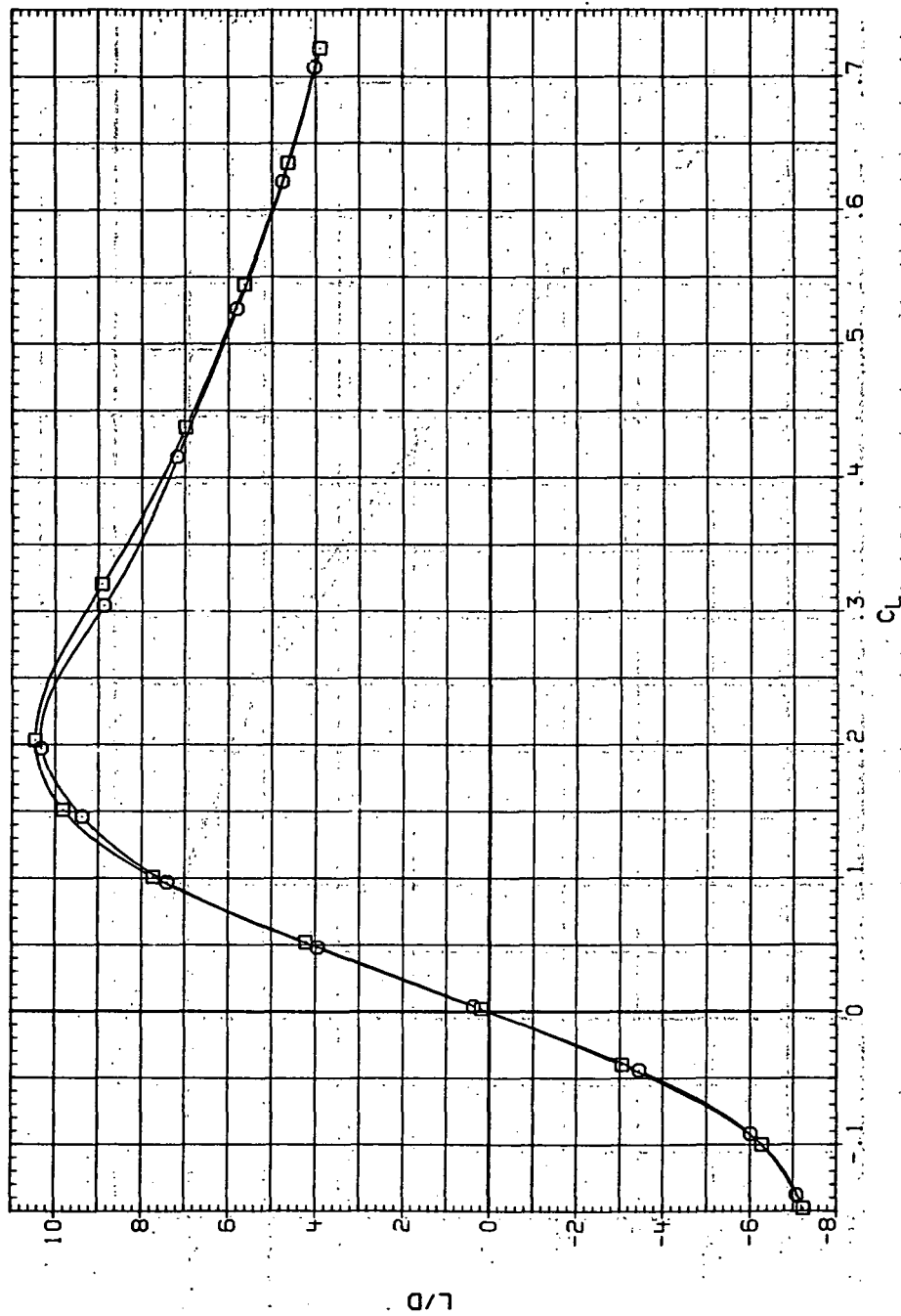


(c) C_m vs C_L

Figure 58.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR183 7M50B (STEEL)
 RJR229 7M50B (STEEL)

RN/L Q(NSH)
 6.230 7.480
 8.200 9.900

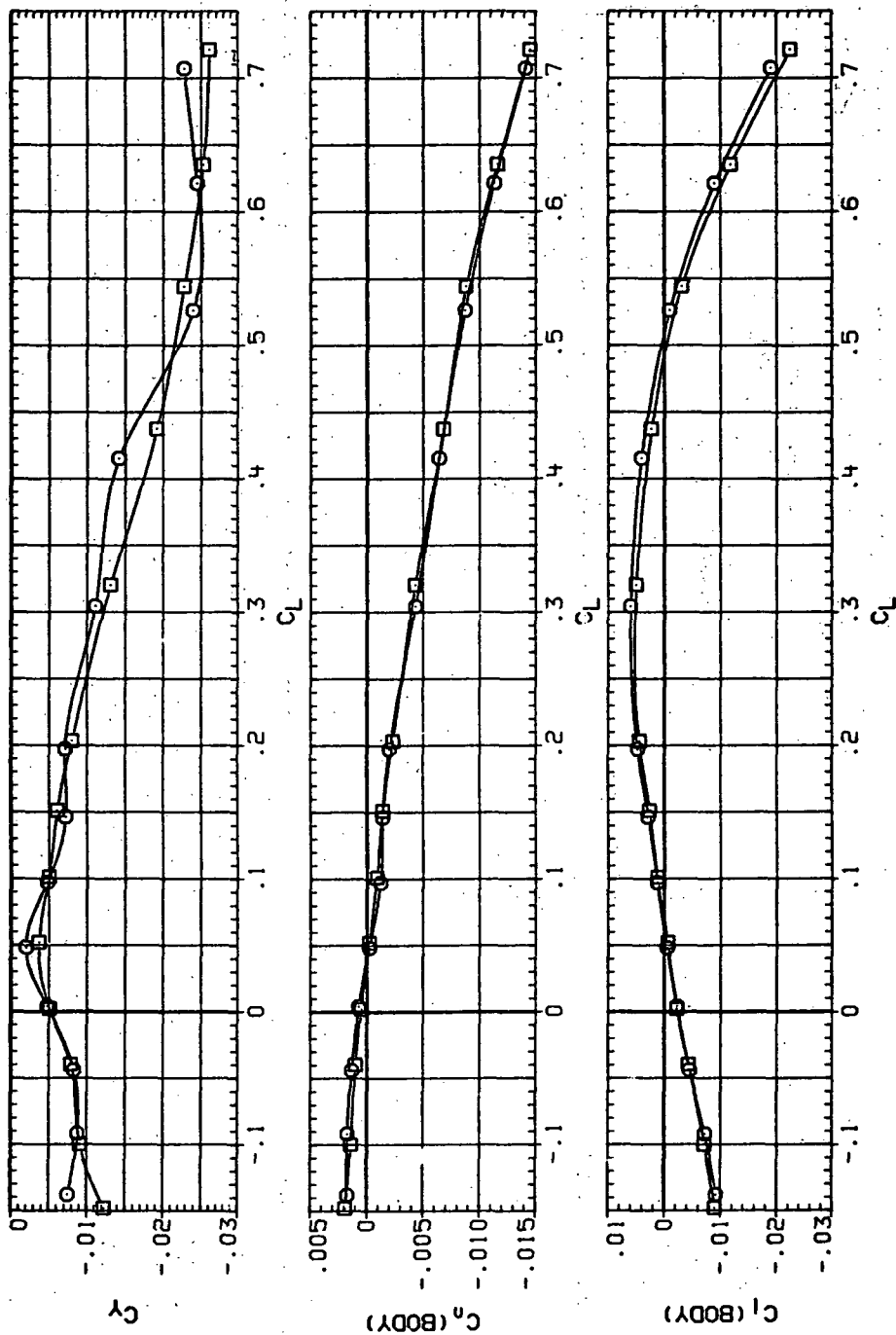


(d) L/D vs C_L .

Figure 58.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR183 ○ 7M308 (STEEL)
 RJR229 □ 7M308 (STEEL)

RN/L Q (NSH)
 6.230 7.480
 8.200 9.900

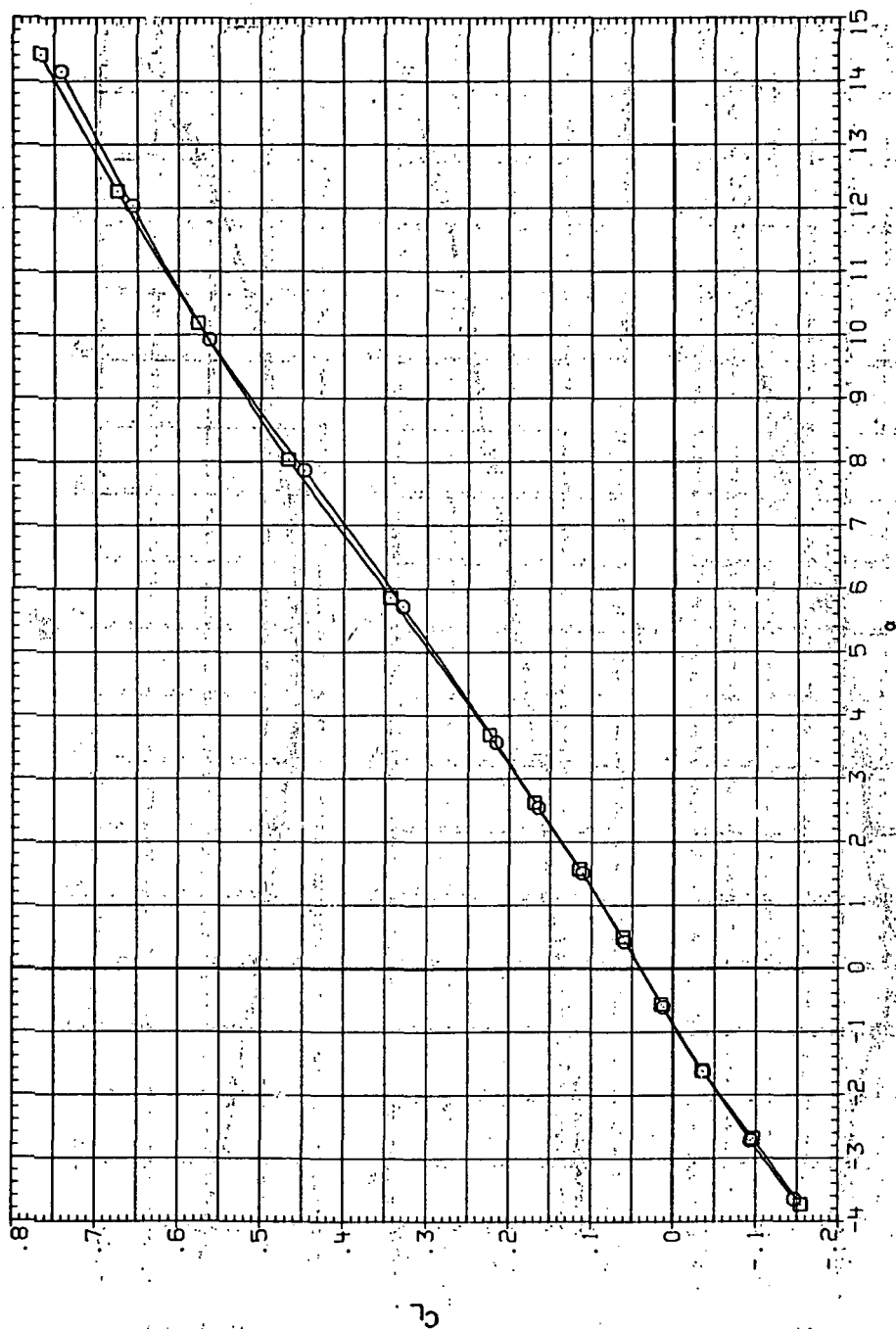


(e) C_Y , C_n and C_l vs C_L .

Figure 58.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR184 7450B (STEEL)
 RJR230 7450B (STEEL)

FN/L Q(NSM)
 6.230 10.600
 8.200 14.100

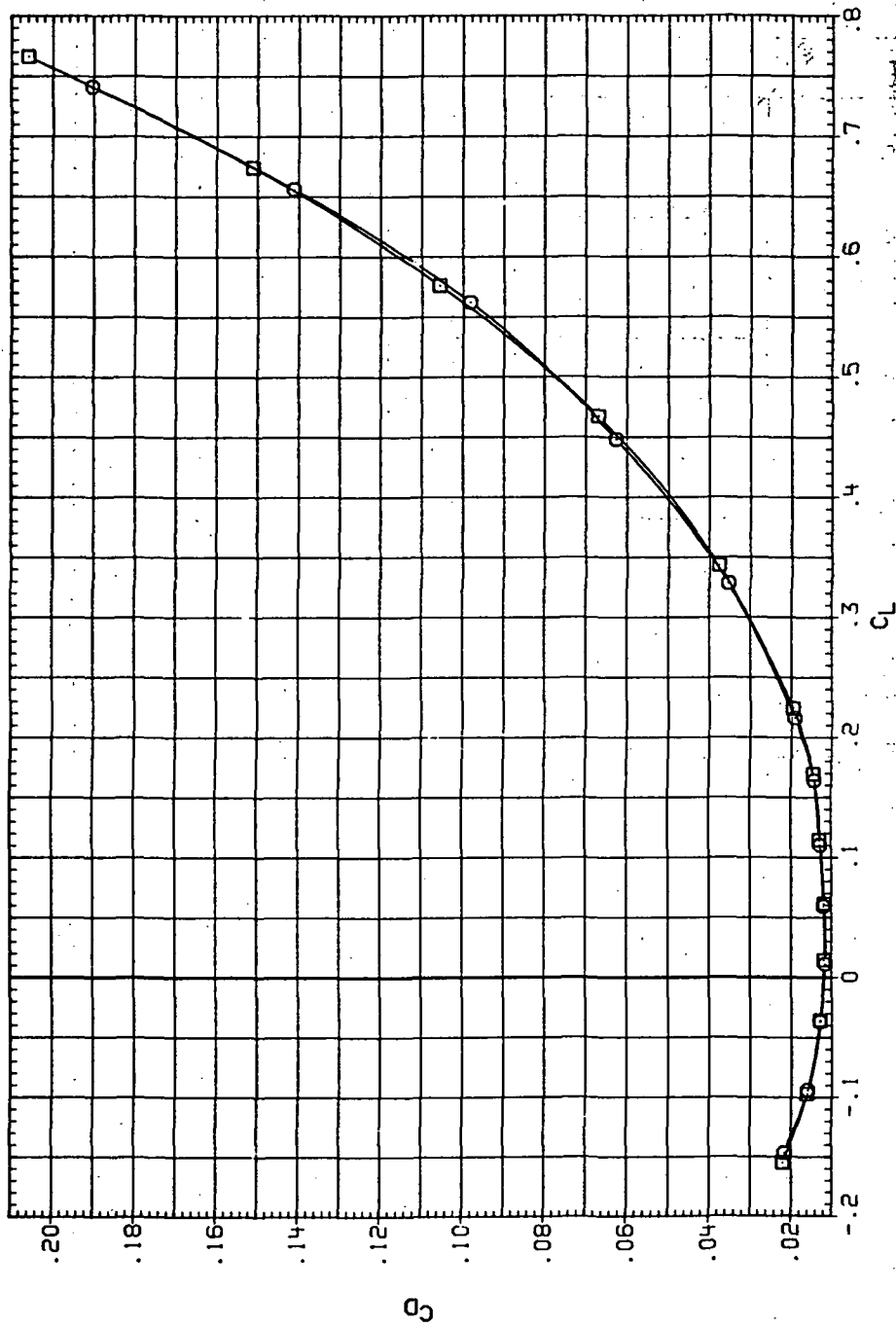


(a) C_L vs α .

Figure 59 - Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR18N 74508 (STEEL)
 RJR230 74508 (STEEL)

RV/L 0.075H
 6.230 10.600
 8.200 14.100

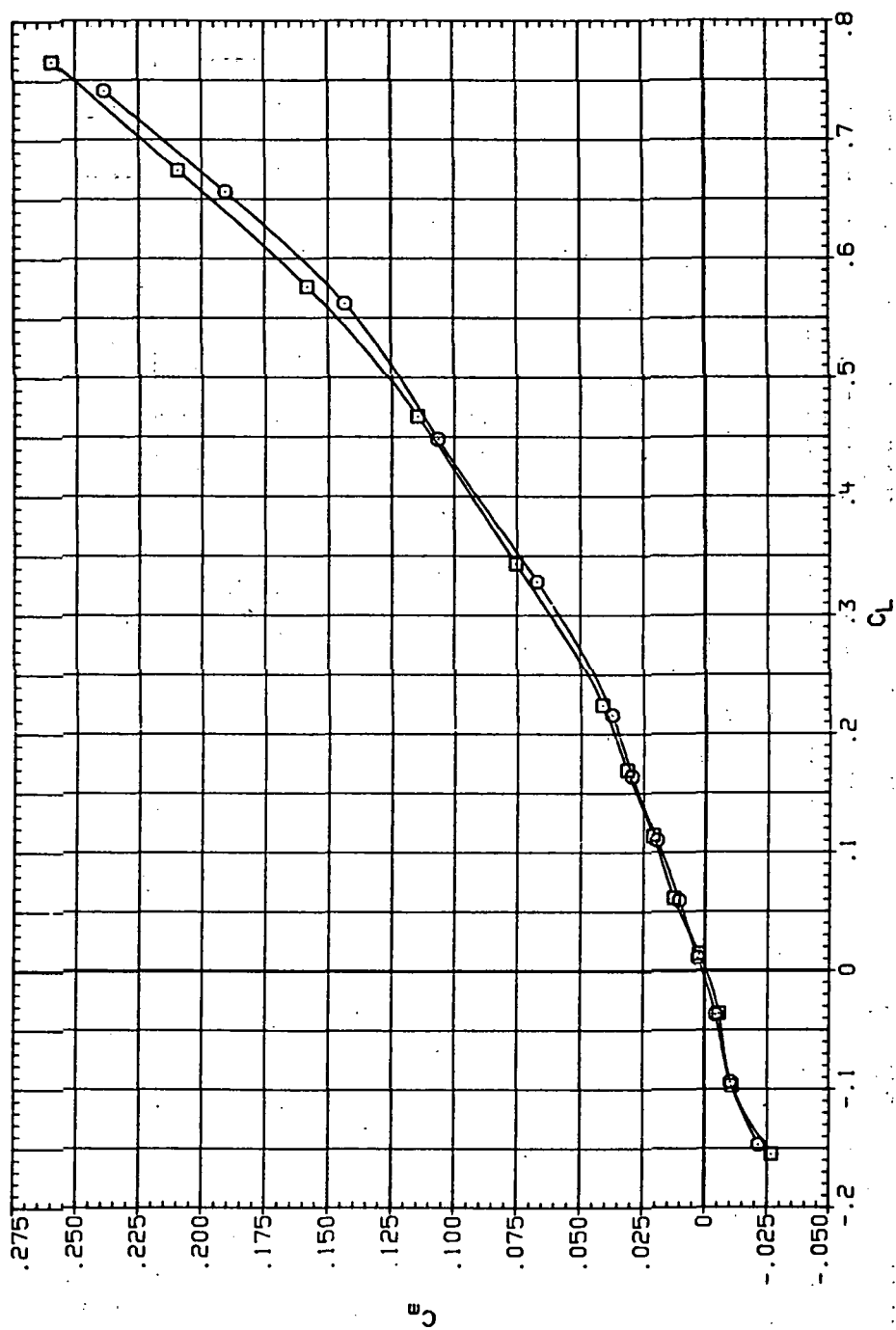


(b) C_D vs C_L .

Figure 59.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR184 ○ 74508 (STEEL)
 RJR230 □ 74508 (STEEL)

RV/L C (NSM)
 6.230 10.600
 8.200 14.100

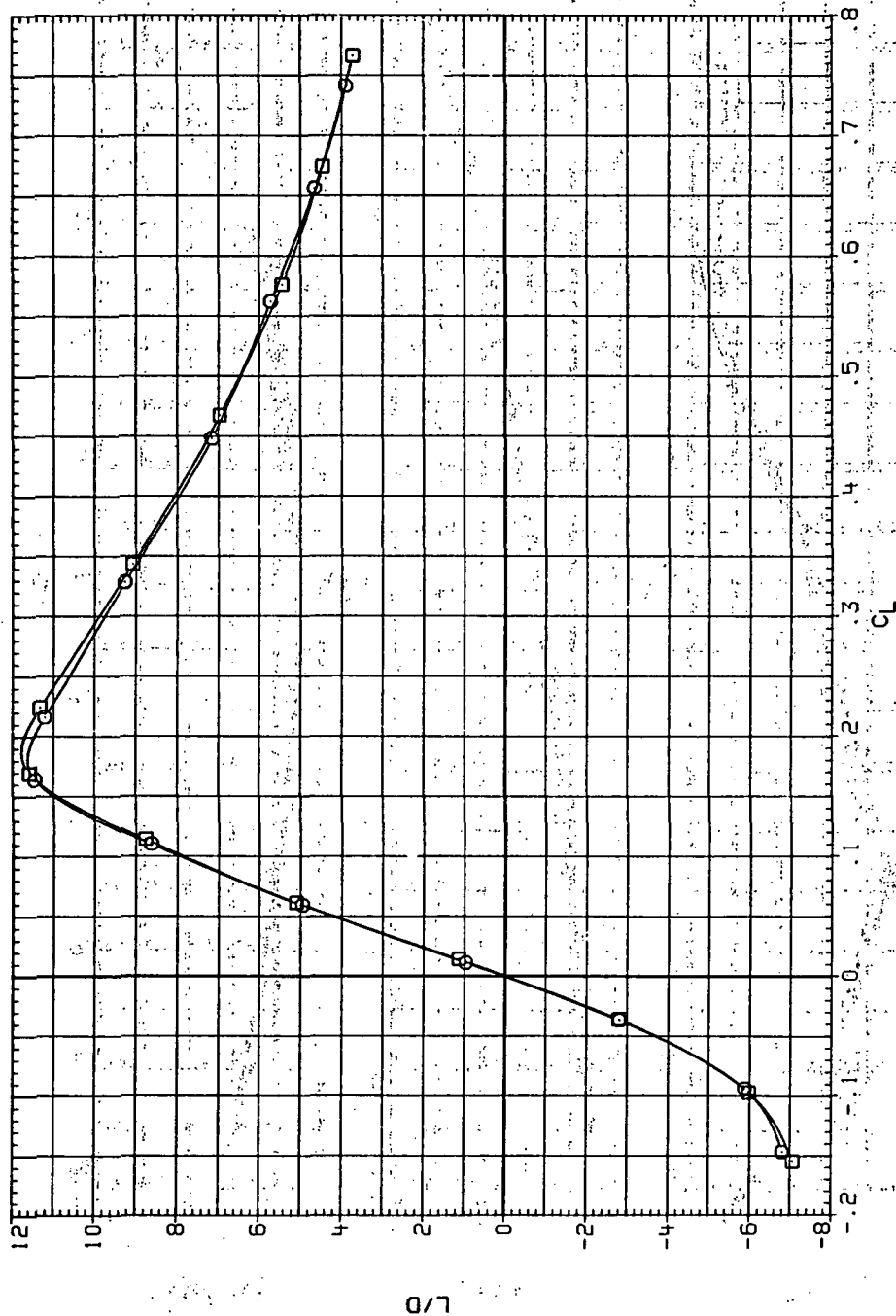


(c) C_m vs C_L .

Figure 59.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR184 ○ 7450B (STEEL)
 RJR230 □ 7450B (STEEL)

RN/L Q(NSH)
 6.230 10.600
 8.200 14.100

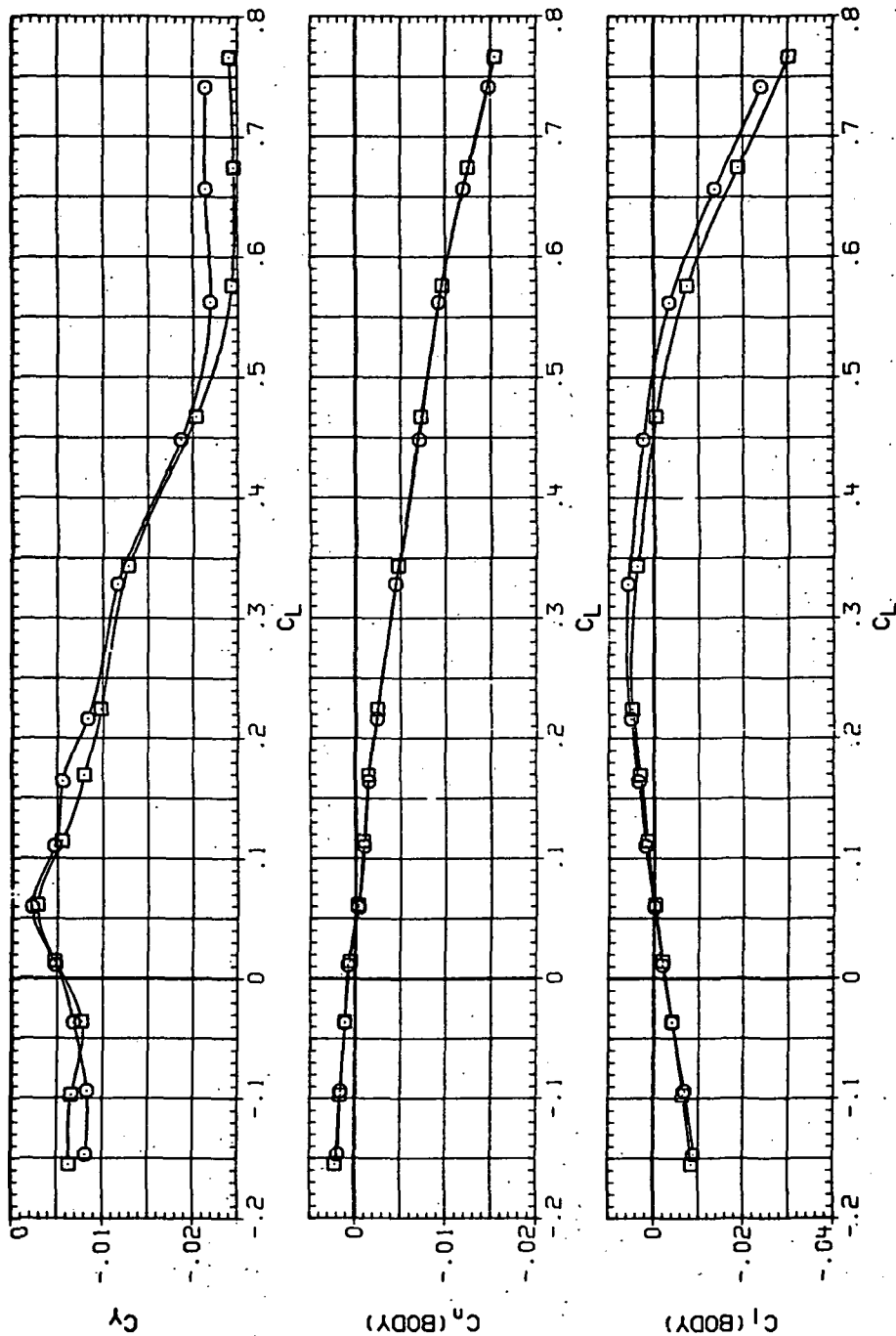


(d) L/D vs C_L .

Figure 59:— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR18W 74508 (STEEL)
 RJR230 74508 (STEEL)

RN/L Q(NSH)
 6.230 10.600
 8.200 14.100

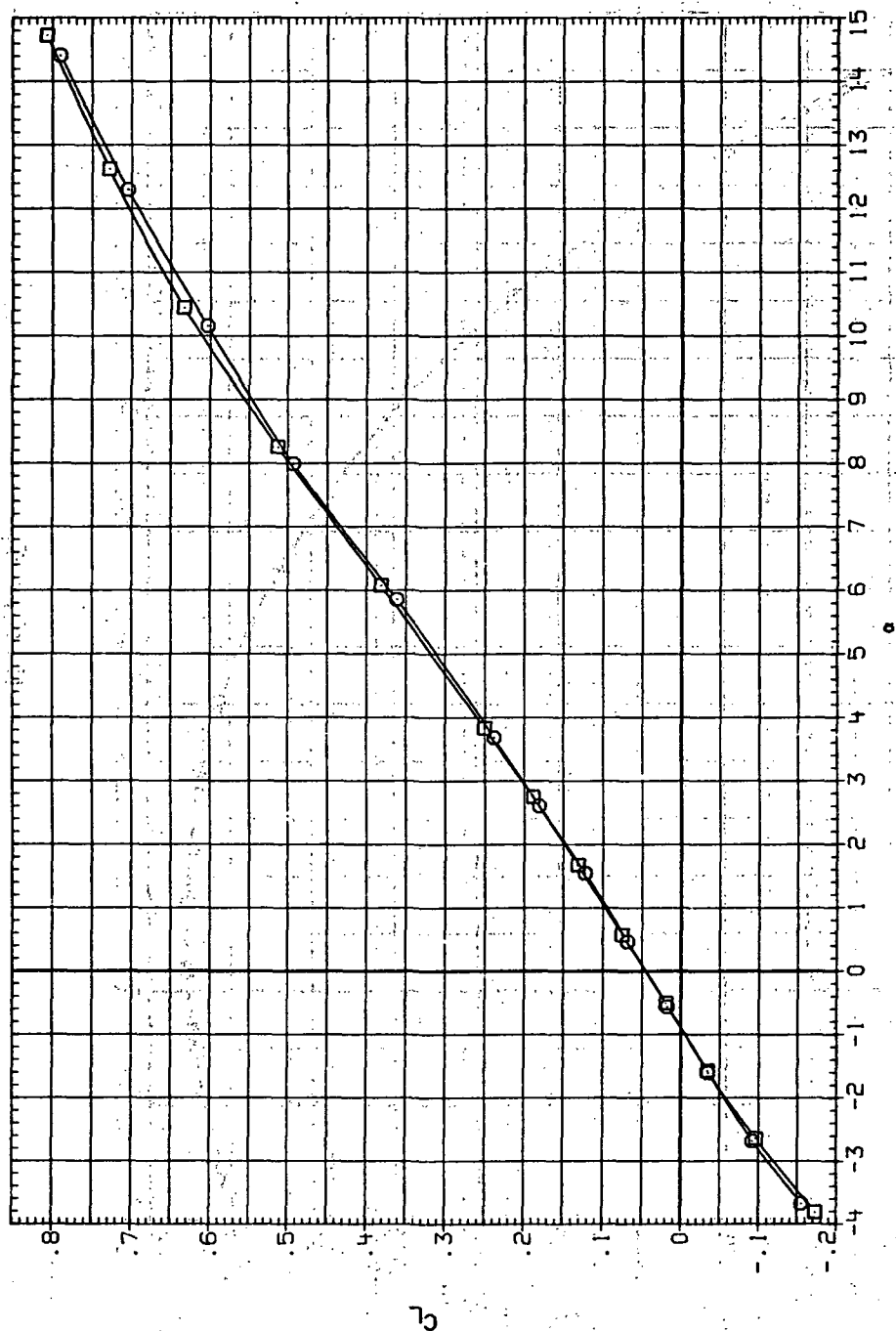


(e) C_Y , C_n and C_l vs C_L .

Figure 59.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR185 $\square$ 7450B (STEEL)
 RJR231 $\circ$ 7450B (STEEL)

RN/L Q (INSE)
 6.230 13.400
 8.200 17.800

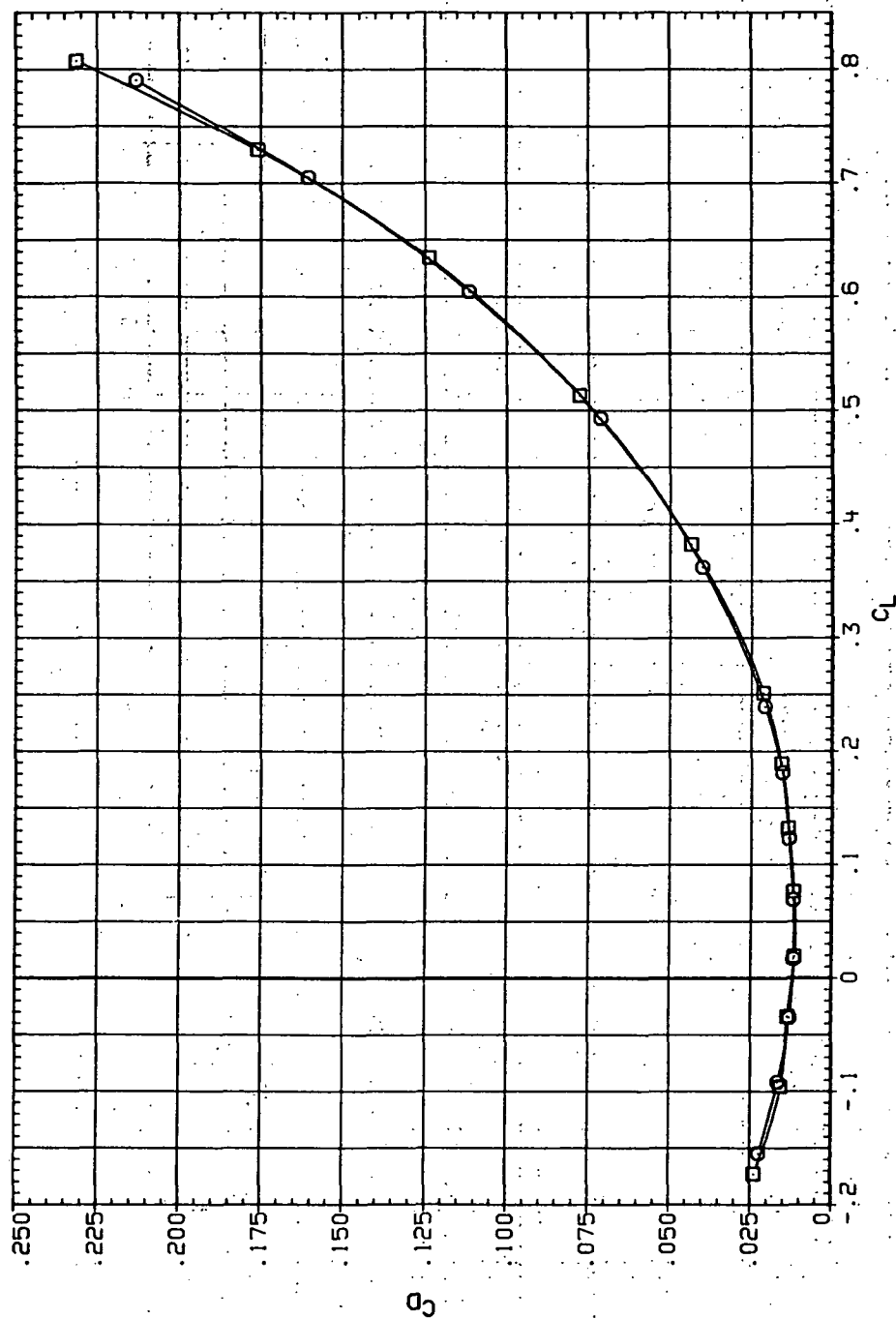


(a) C_L vs α .

Figure 60.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUR195 ○ 7M50B (STEEL)
 RUR231 □ 7M50B (STEEL)

RN/L Q(NSH)
 6.230 13,400
 8.200 17,800

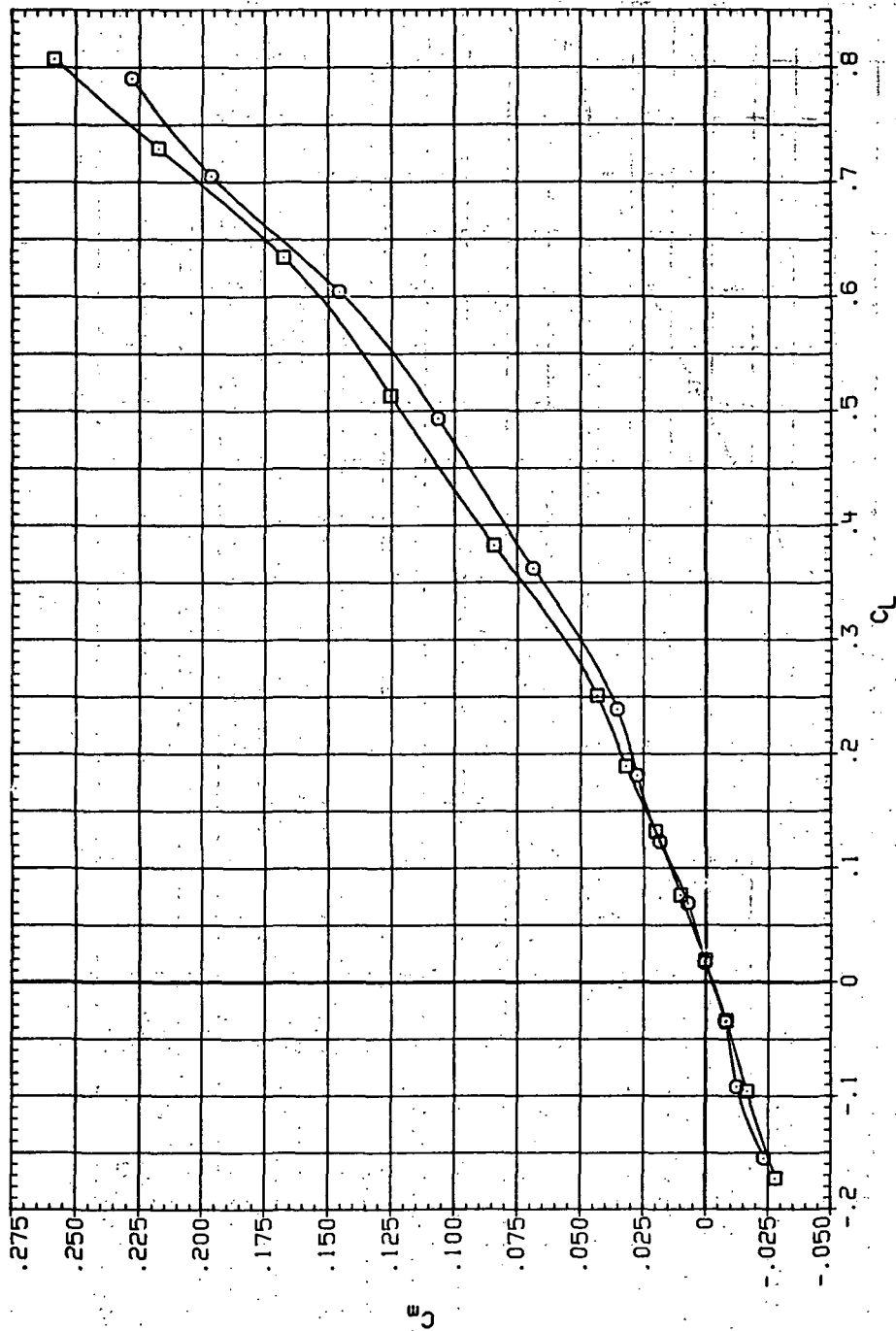


(b) C_D vs C_L

Figure 60.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR185 ○ 74508 (STEEL)
 RJR231 □ 74508 (STEEL)

RV/L Q (NSH)
 6.230 13.400
 8.200 17.800

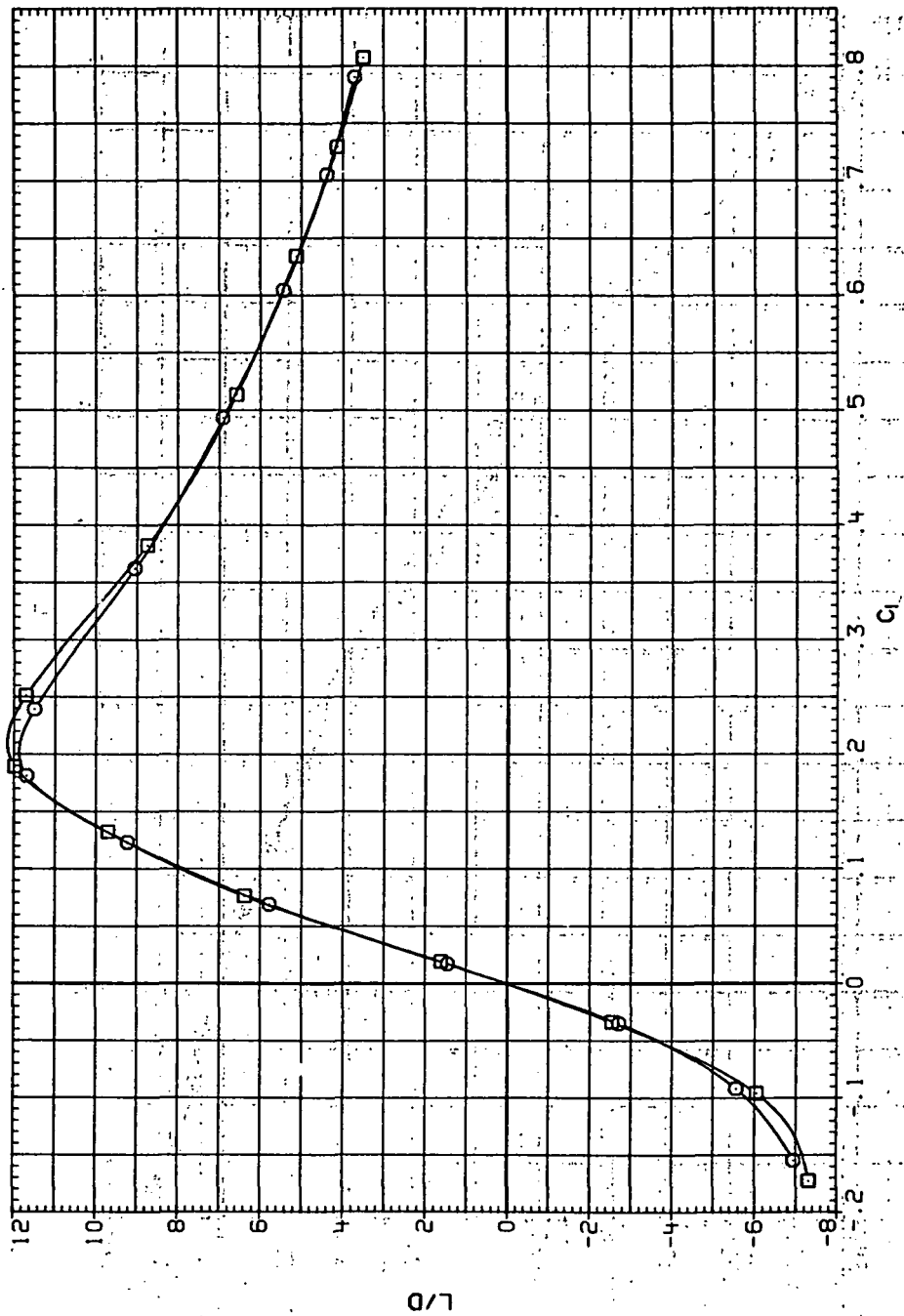


(c) C_m vs C_L .

Figure 60.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR185 74508 (STEEL)
 RJR231 74508 (STEEL)

RV/L Q(NSM)
 8.230 13.400
 8.200 17.800

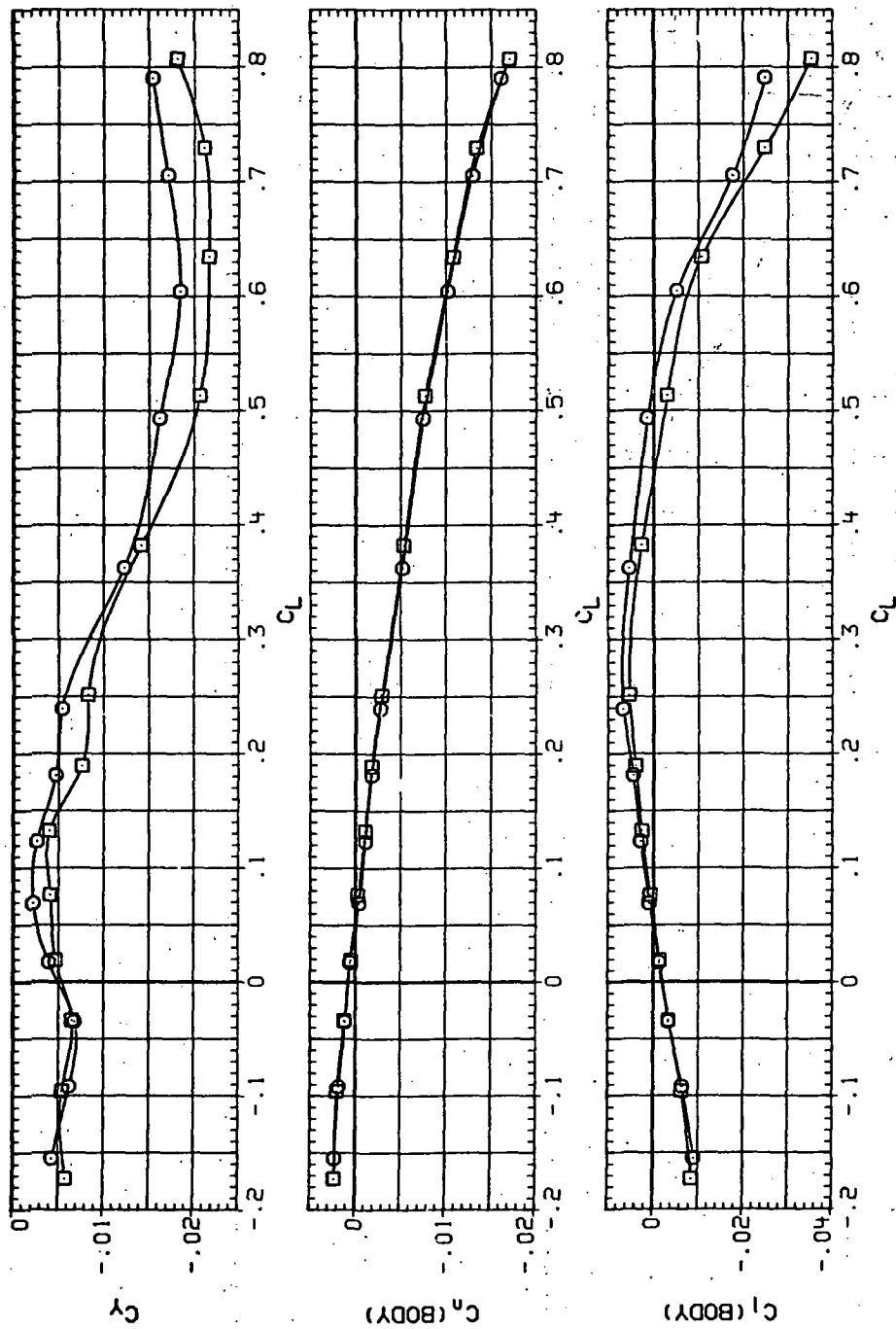


(d) L/D vs C_L

Figure 60- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR185 7450B (STEEL)
 RJR231 7450B (STEEL)

RN/L C (INSH)
 6.230 13.400
 8.200 17.800

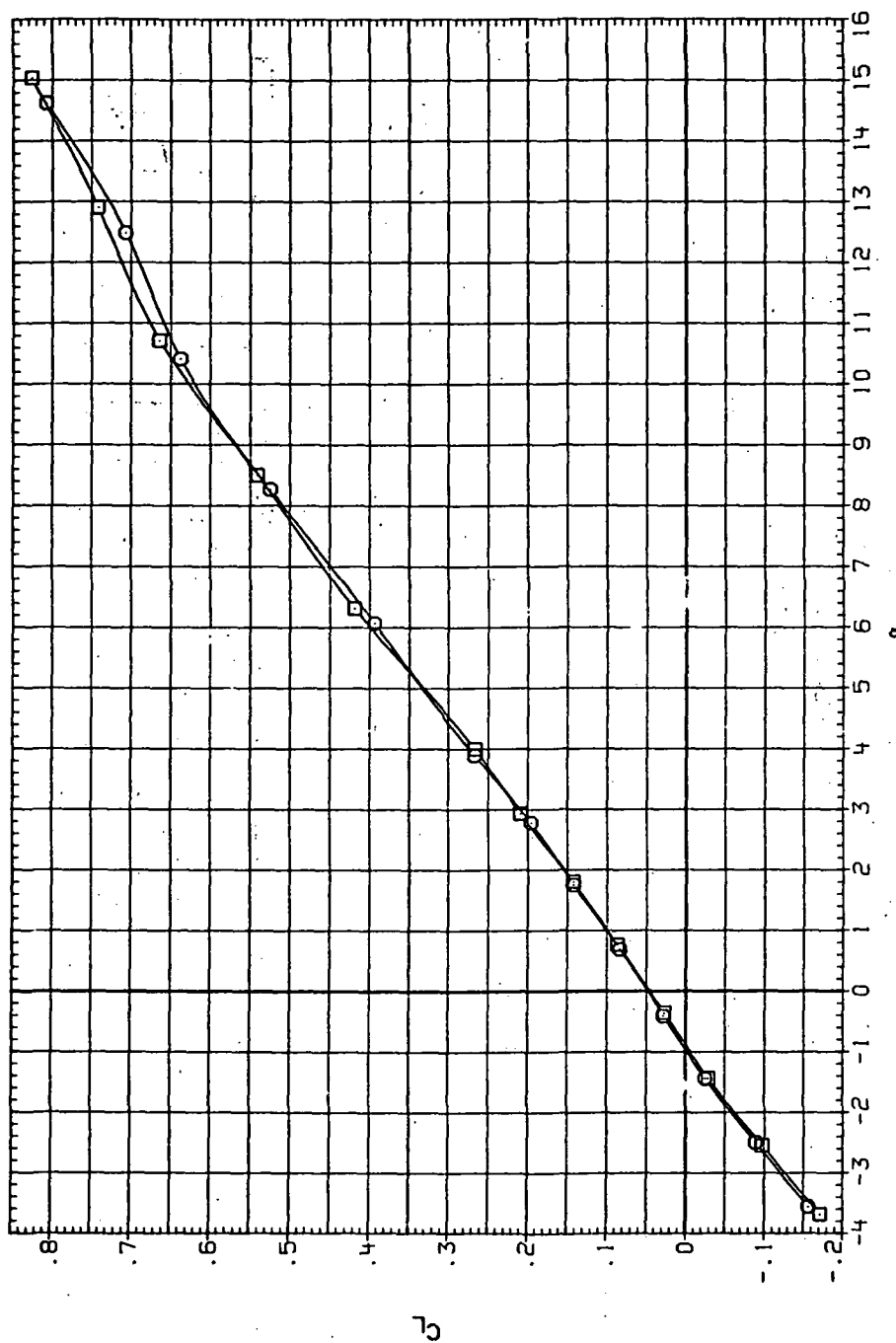


(e) C_Y , C_n and C_l vs C_L .

Figure 60. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR186 74508 (STEEL)
 RJR232 74509 (STEEL)

RN/L Q(1.5M)
 6.230 14.500
 8.200 19.200

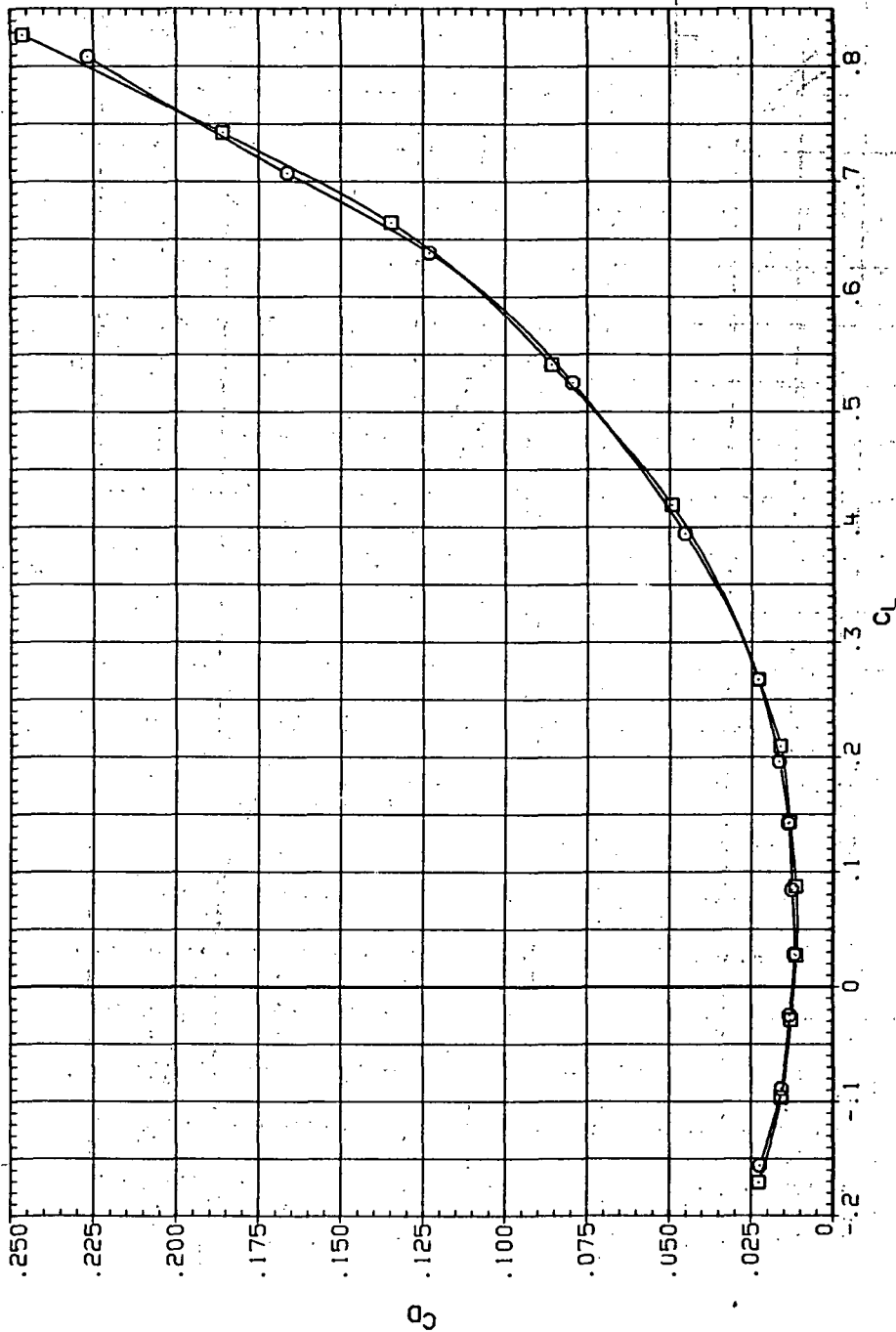


(a) C_L vs α .

Figure 61.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.9$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR185 7.508 (STEEL)
 RJR232 7.4508 (STEEL)

RN/L Q(NSM)
 6.230 14.500
 8.200 19.200

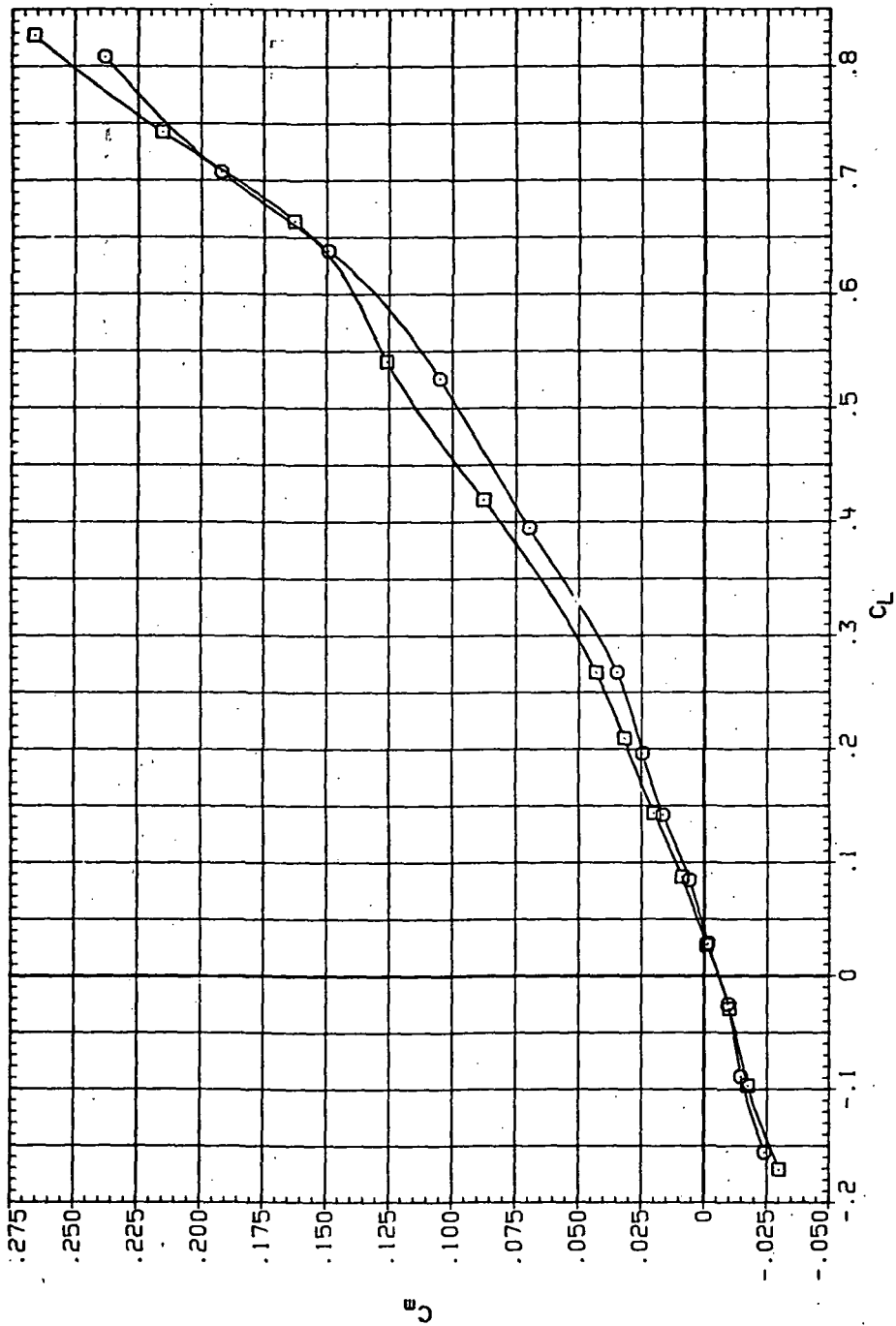


(b) C_D vs C_L .

Figure 61. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR186 $\square$ 7450B (STEEL)
 RJR232 $\circ$ 7450B (STEEL)

RN/L Q(NSH)
 6.230 14.500
 8.200 19.200

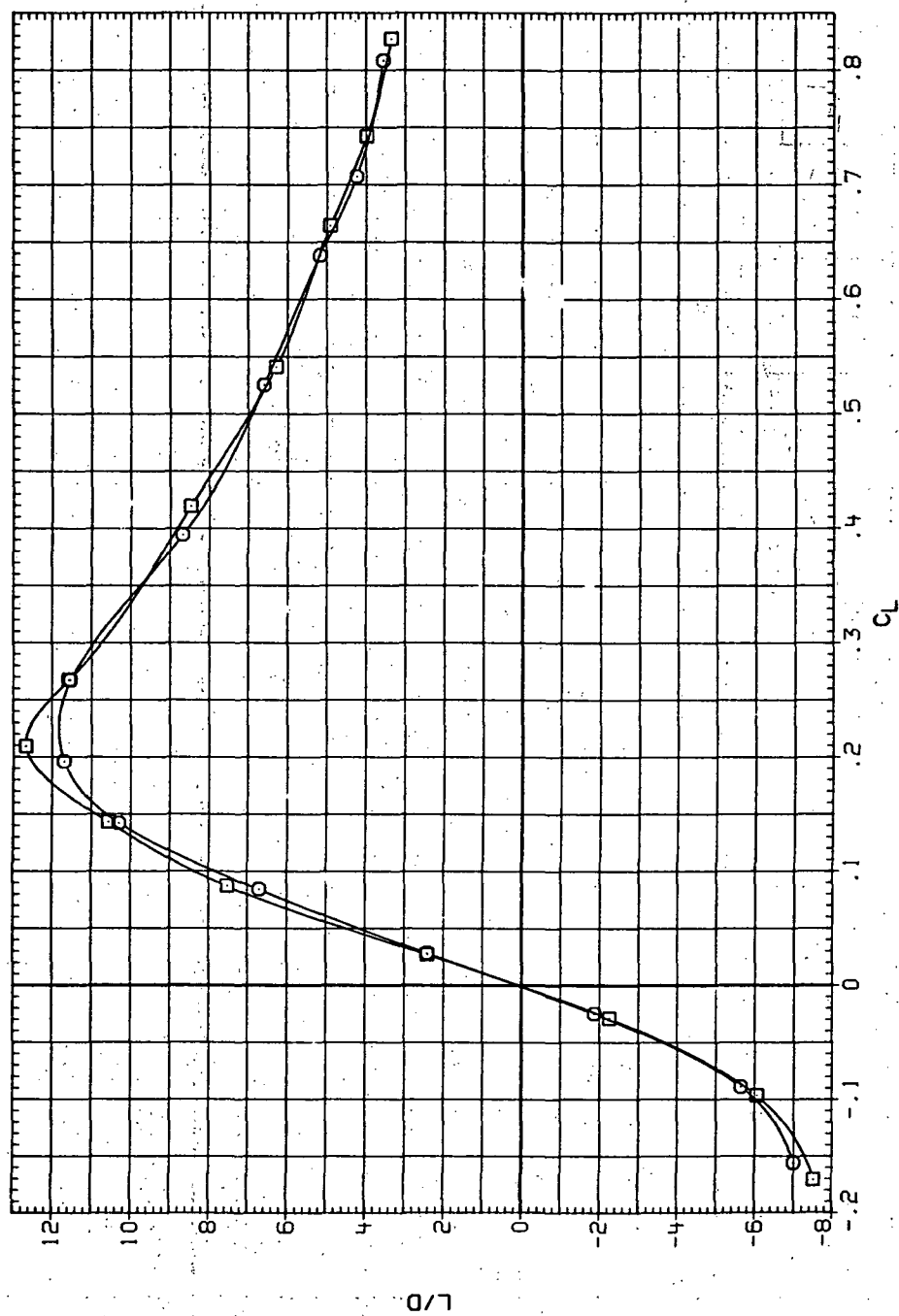


(c) C_m vs C_L .

Figure 61.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUI186 $\square$ 7/450B (STEEL)
 RUI232 $\square$ 7/450B (STEEL)

RV/L Q(NSH)
 6.230 14.500
 8.200 19.200

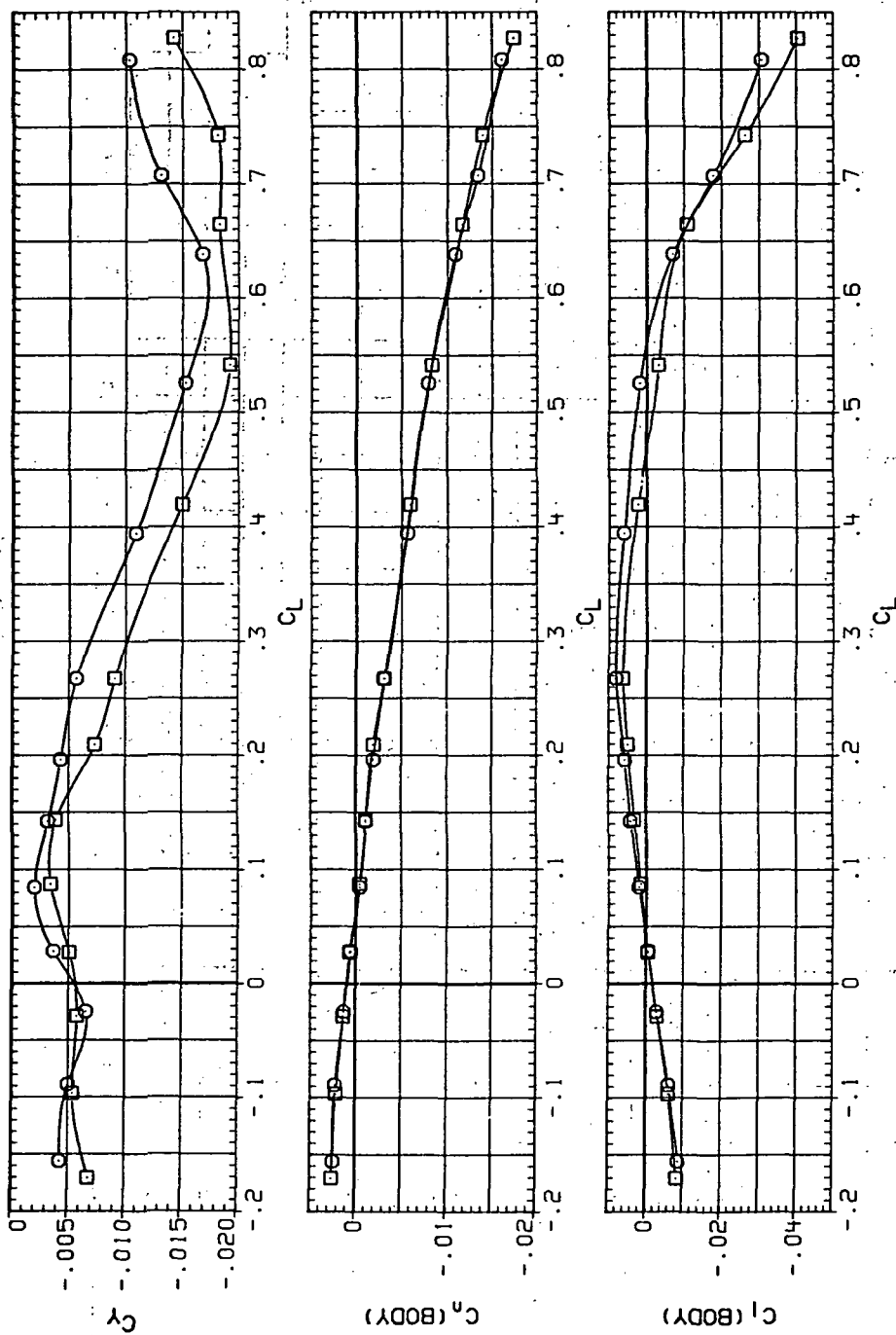


(d) L/D vs C_L .

Figure 61. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR185 7N50B (STEEL)
 RJR232 7N50B (STEEL)

RN/L Q(NSH)
 6.230 14.500
 8.200 19.200

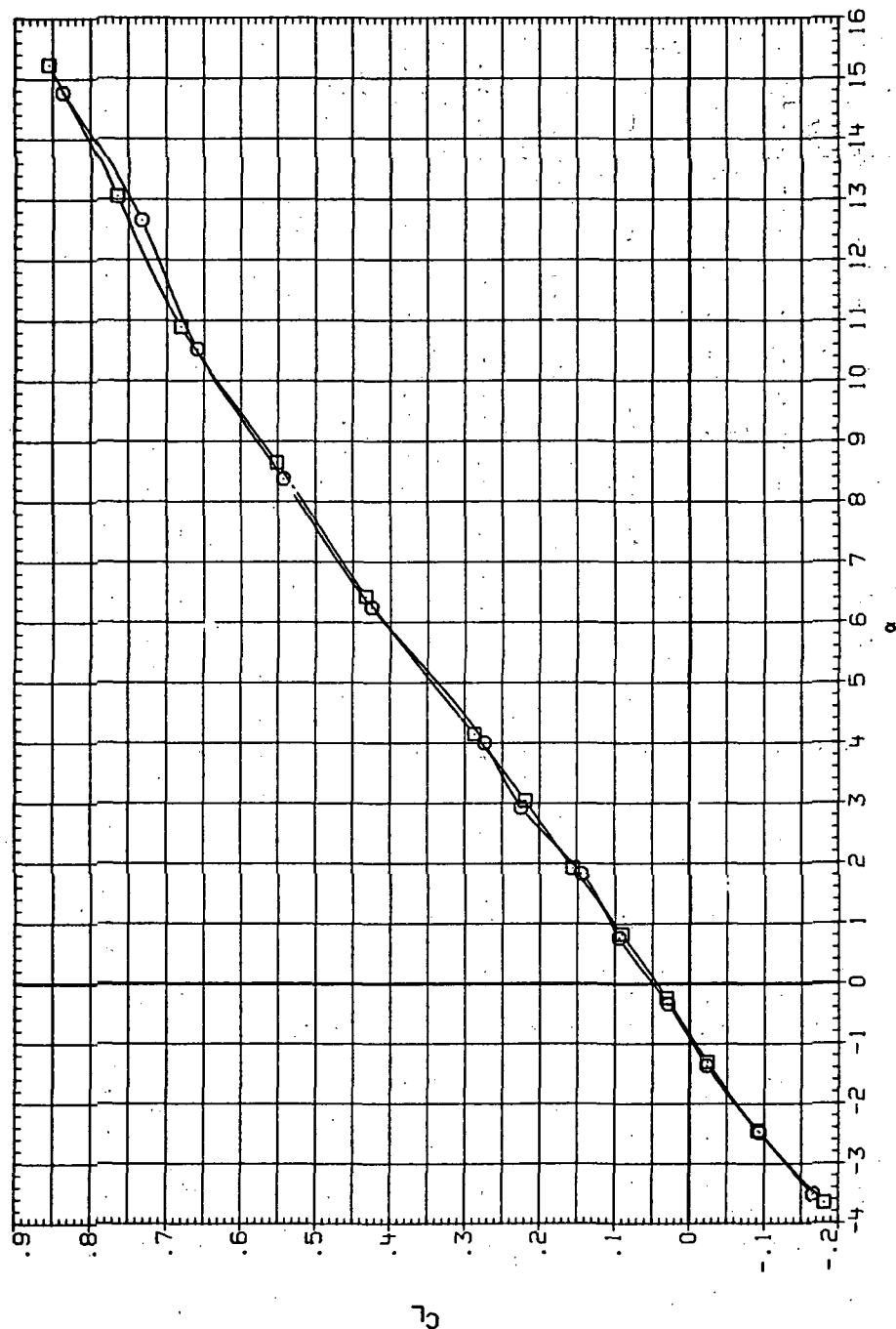


(e) C_Y , C_n and C_l vs C_L .

Figure 61.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR197 $\square$ 74508 (STEEL)
 RJR233 $\square$ 74508 (STEEL)

RV/L α (DEG)
 6.230 19.000
 6.200 19.900

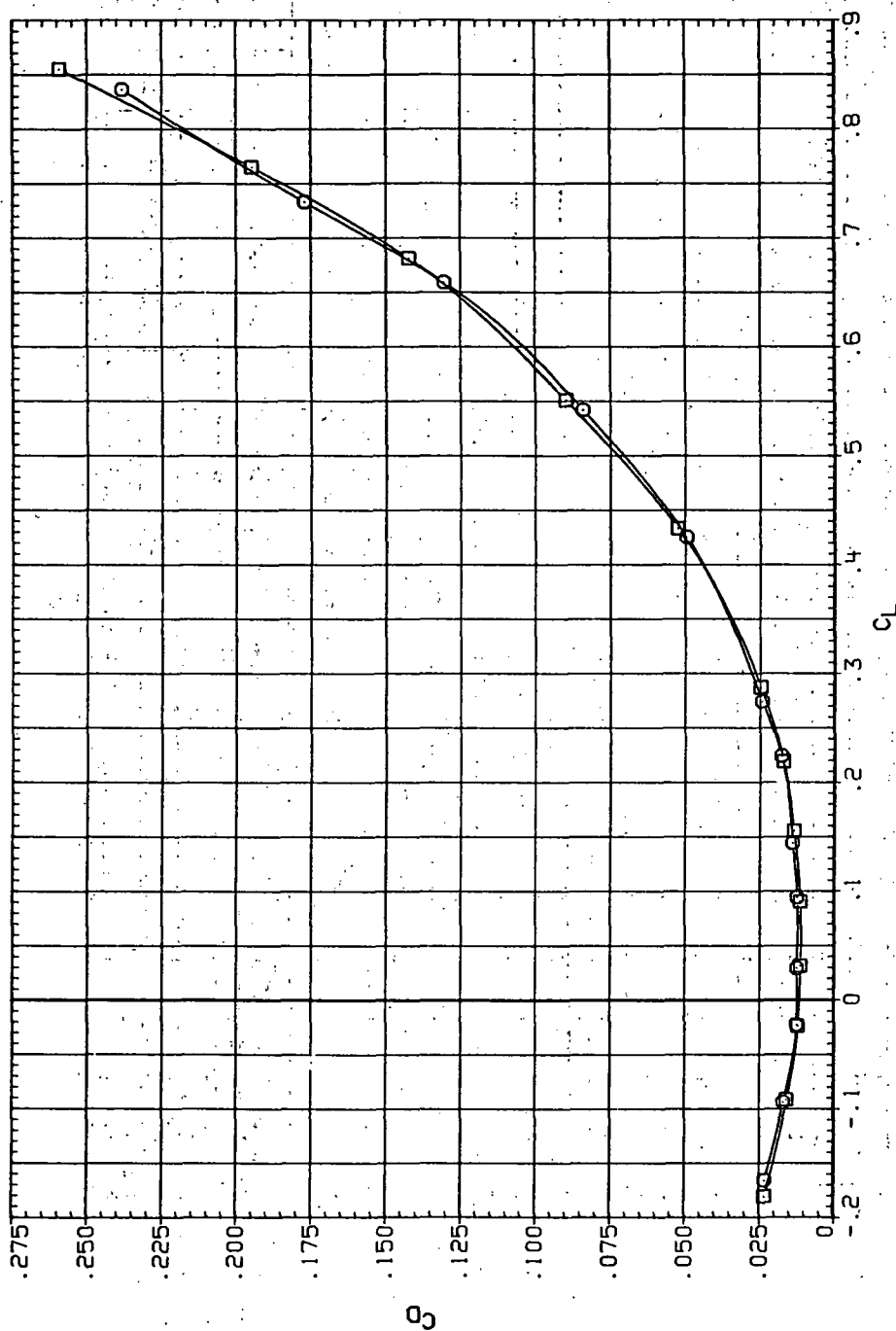


(a) C_L vs α .

Figure 62.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUI197 $\square$ 74508 (STEEL)
 RUI233 $\square$ 74508 (STEEL)

RV/L Q (NEM) 6.230 15.000
 8.200 19.900

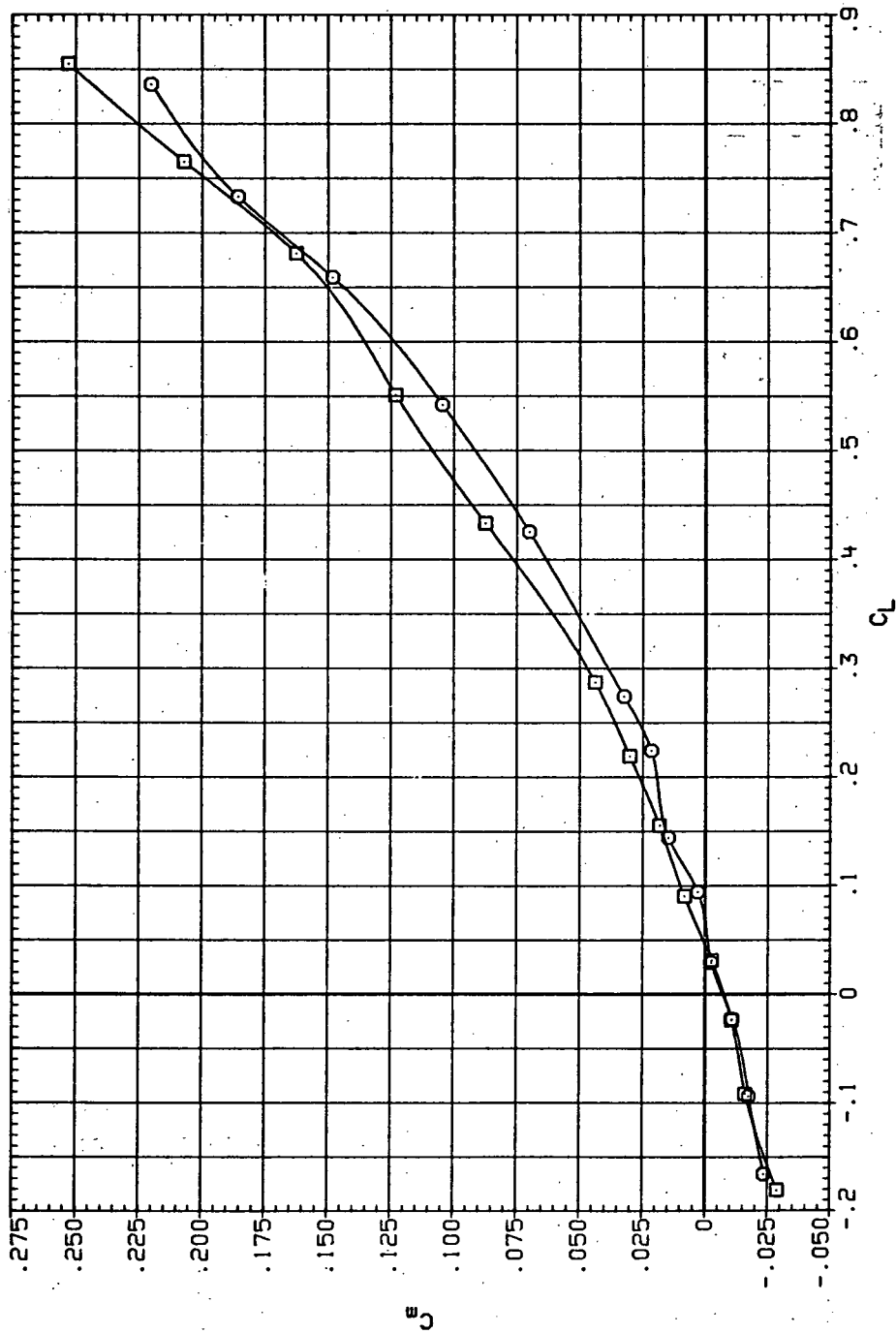


(b) C_D vs C_L .

Figure 62. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR187 $\square$ 7450B (STEEL)
 RJR233 $\circ$ 7450B (STEEL)

RV/L Q (NSH)
 6.230 15.000
 8.200 19.900

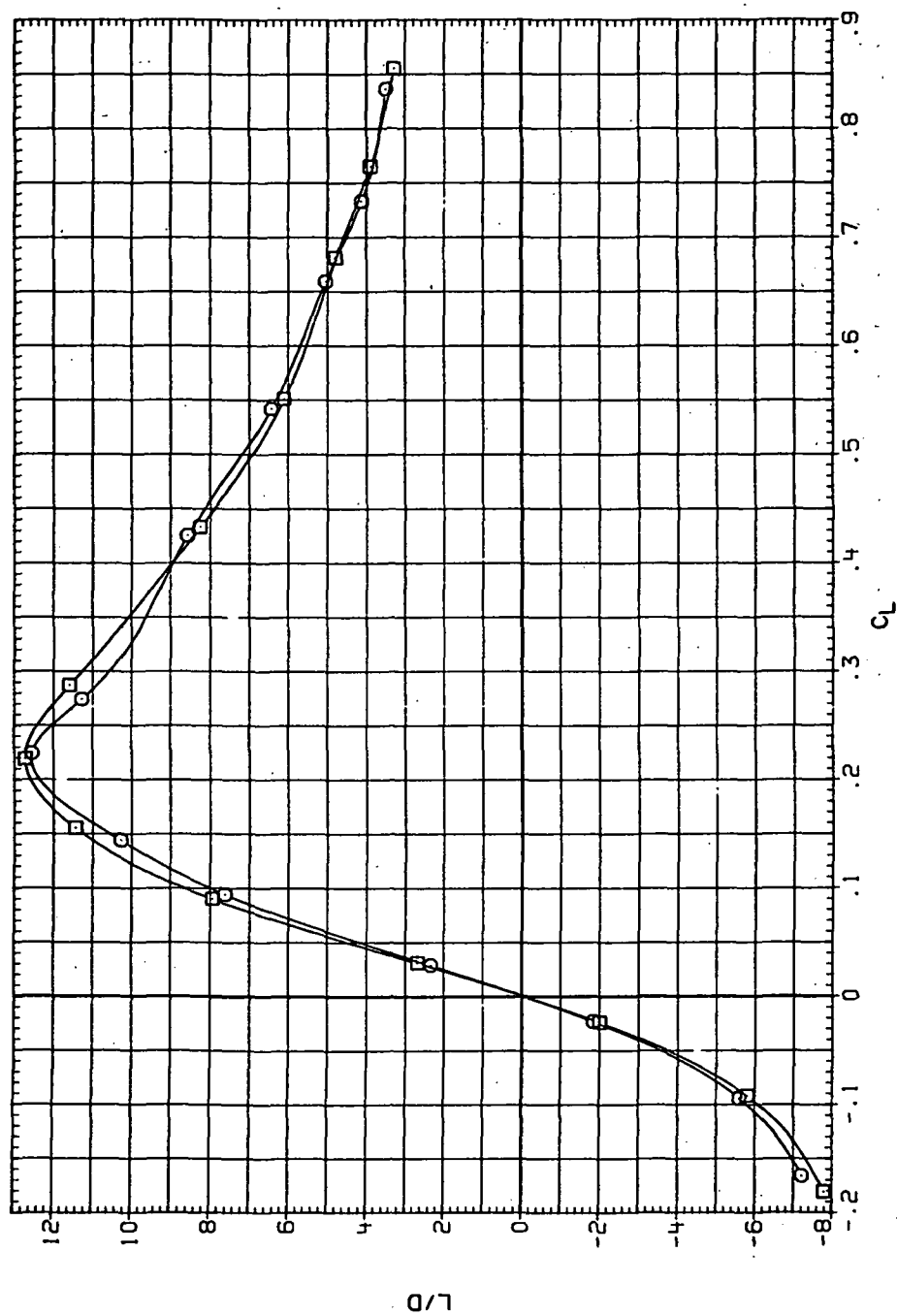


(c) C_m vs C_L

Figure 62.— Continued.

DATA SET SYMBOL CONFIGURATION
 R01187 7450B (STEEL)
 R01233 7450B (STEEL)

RV/L Q (INSH)
 6.230 15.000
 8.200 19.900

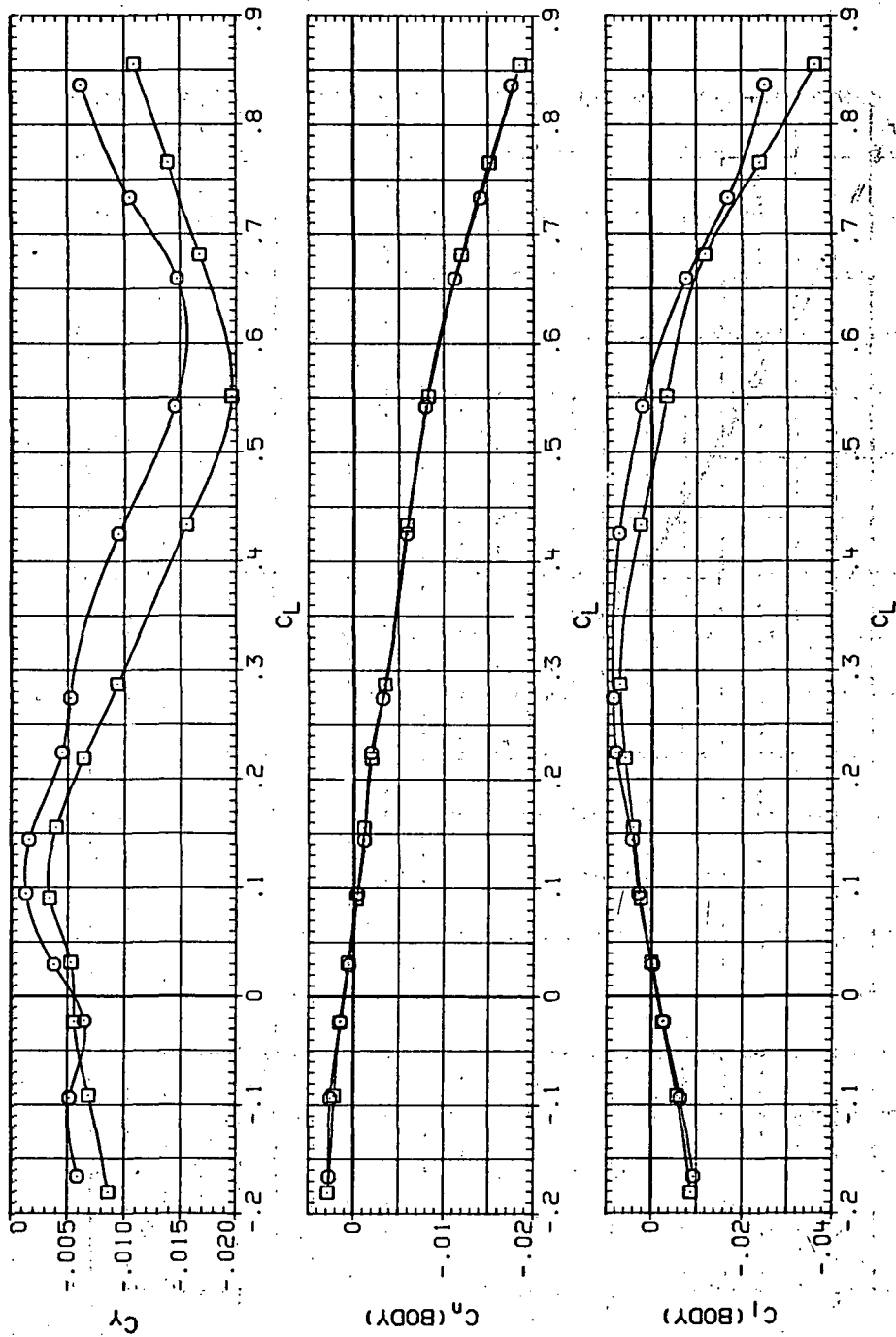


(d) L/D vs C_L .

Figure 62.- Continued.

DATA SET SYMBOL CONFIGURATION
 RUR197 $\square$ 74508 (STEEL)
 RUR233 $\square$ 74508 (STEEL)

RN/L Q(NSH)
 6.230 15.000
 8.200 19.900

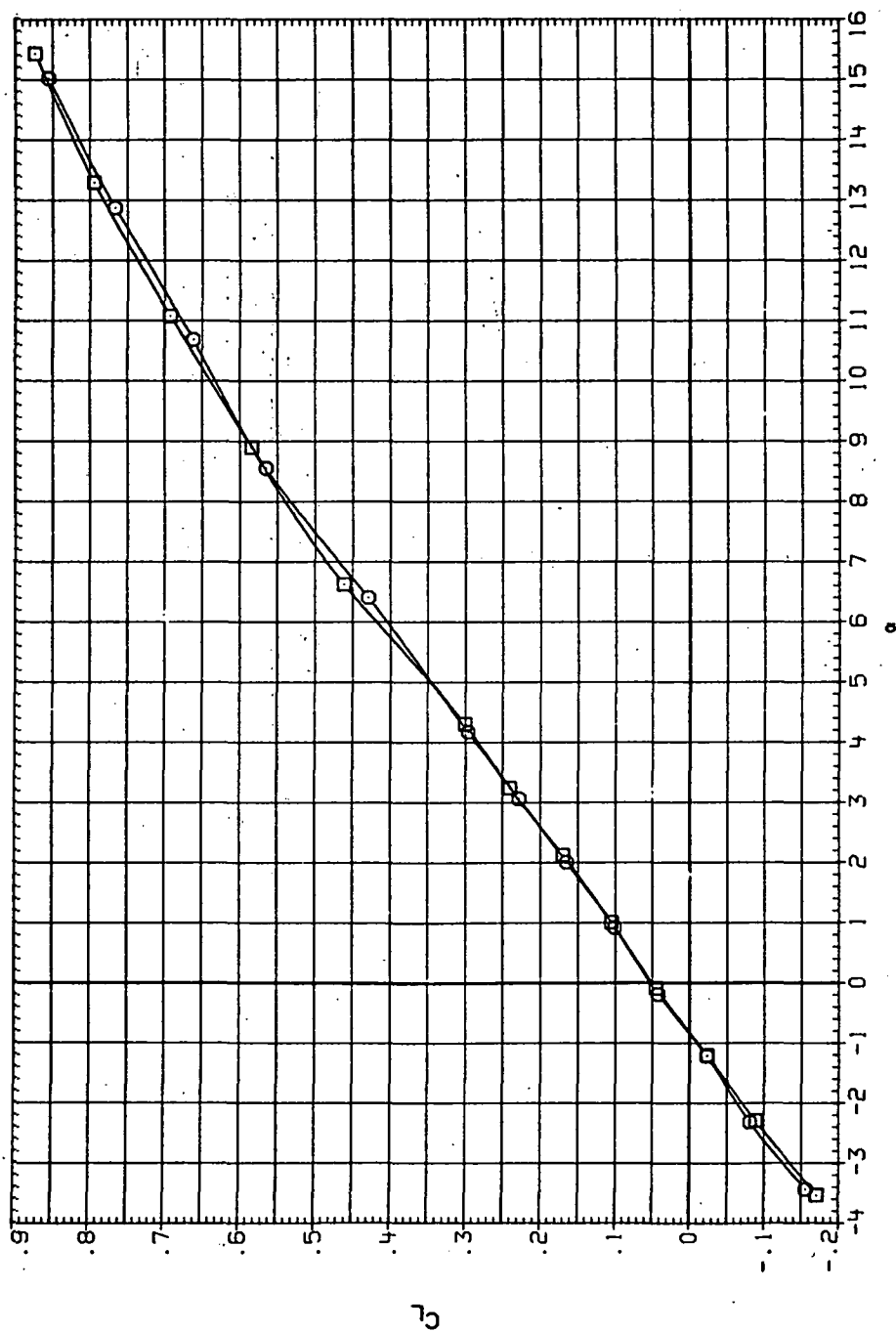


(e) C_Y , C_n and C_l vs C_L .

Figure 62. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR188 7450B (STEEL)
 RJR234 7450B (STEEL)

RM/L Q(NSM)
 6.230 16.400
 8.200 21.200

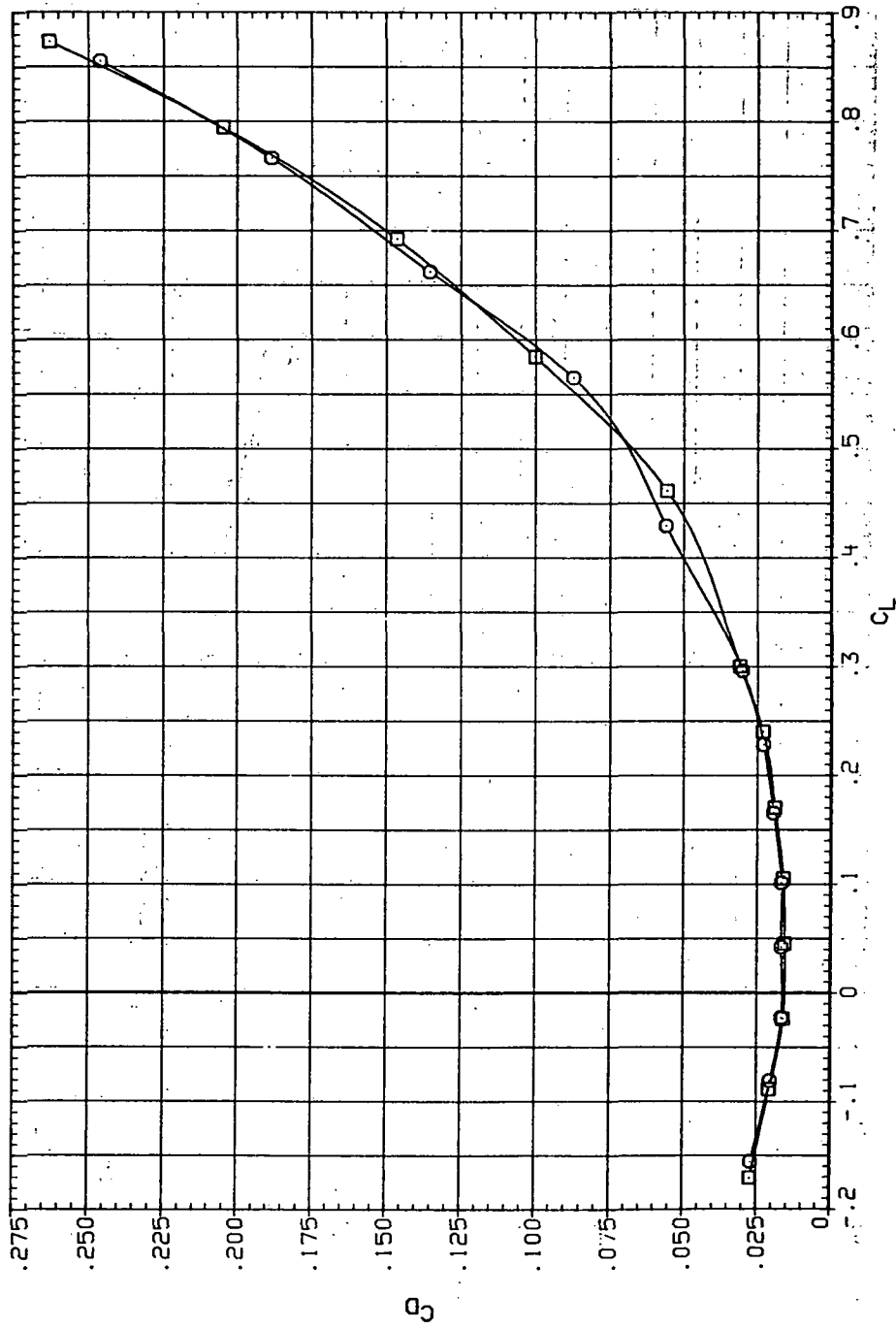


(a) C_L vs α .

Figure 63.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.1$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR188 ○ 7M50B (STEEL)
 RJR234 □ 7M50B (STEEL)

RM/L Q(NSM)
 6.230 16.400
 8.200 21.200

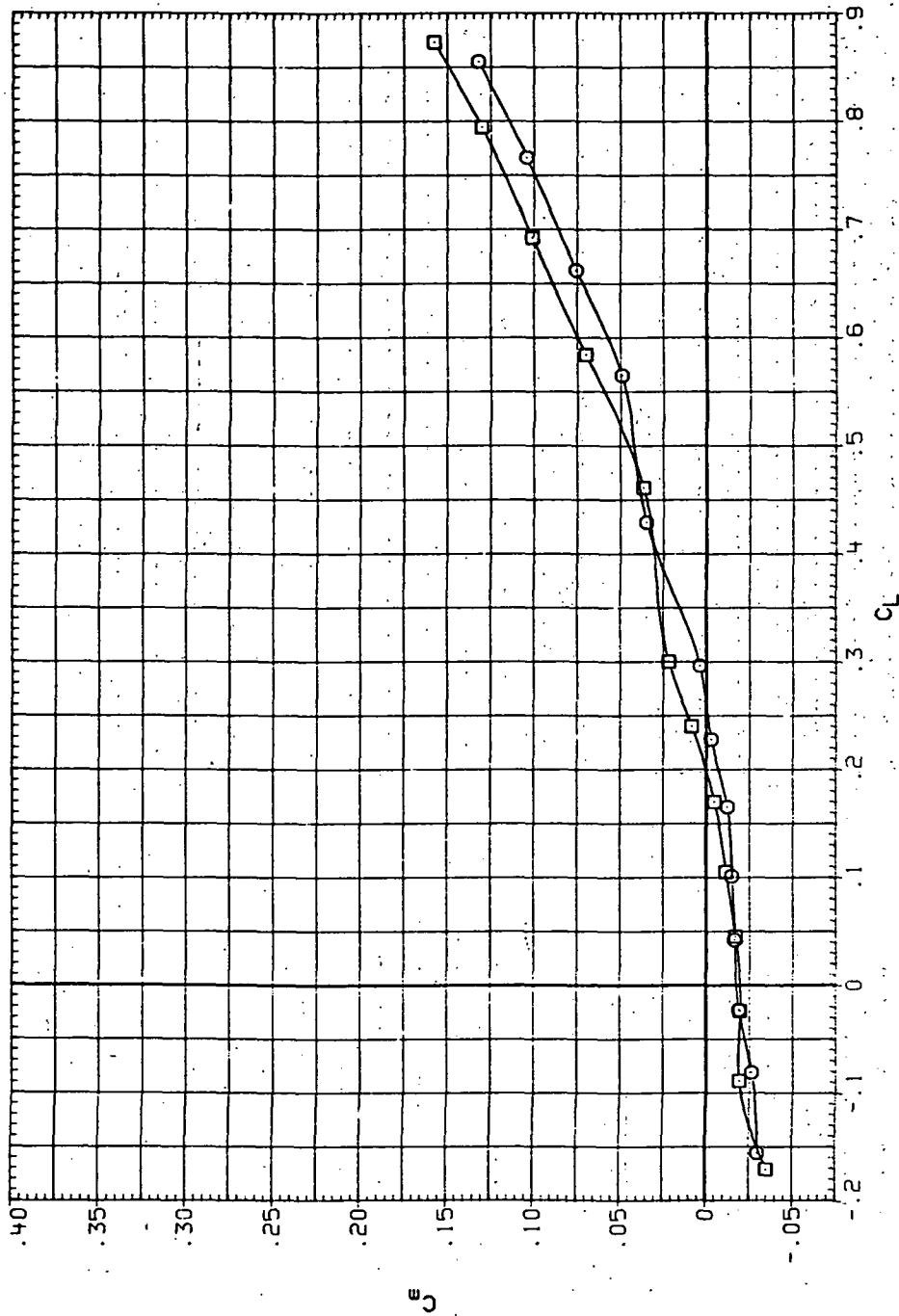


(b) C_D vs C_L

Figure 63.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUI188 ○ 74508 (STEEL)
 RUI234 □ 74508 (STEEL)

RN/L Q (NSM)
 6.230 16.400
 8.200 21.200

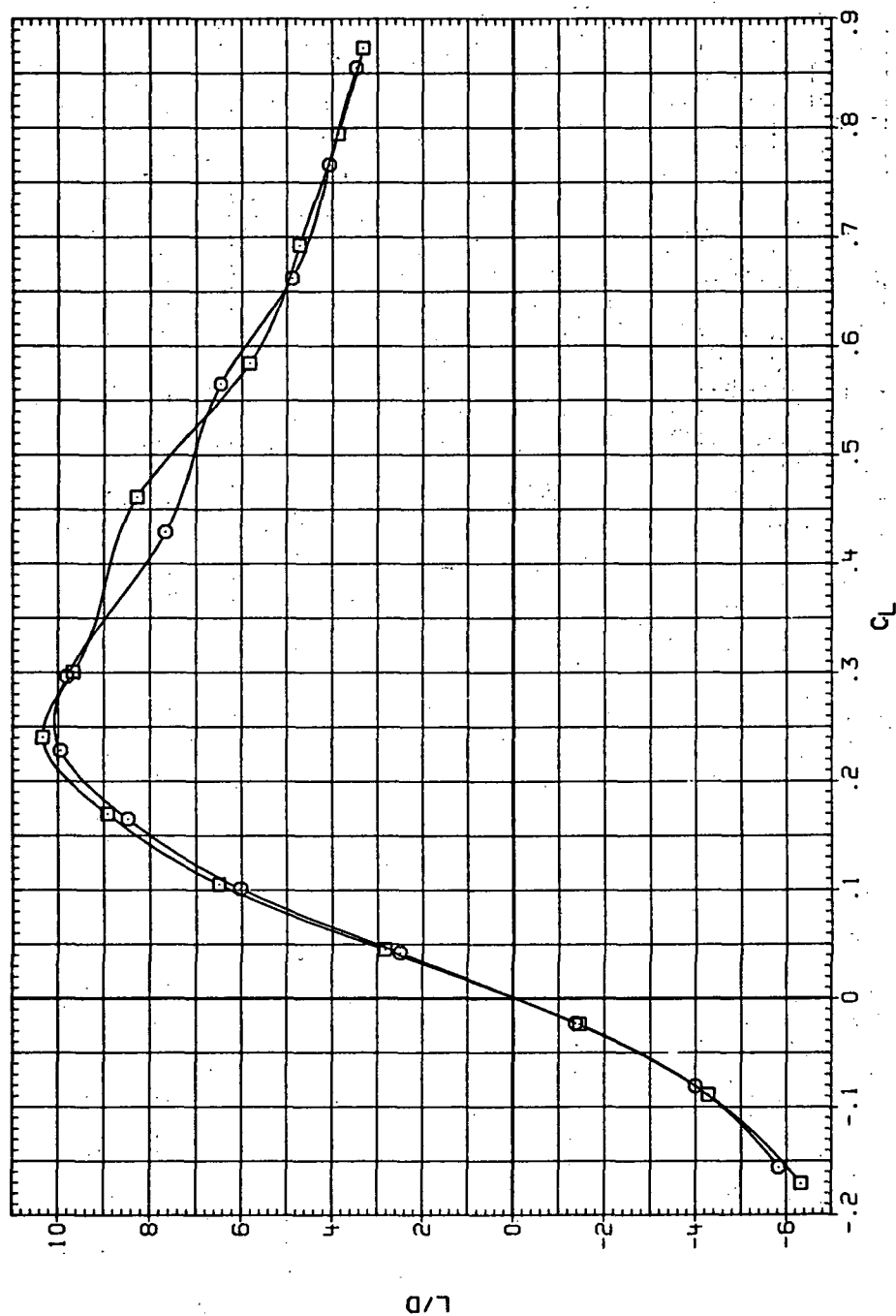


(c) C_m vs C_L .

Figure 63.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP188 74508 (STEEL)
 RUP234 74508 (STEEL)

RN/L Q(NS)
 8.230 16.400
 8.200 21.200

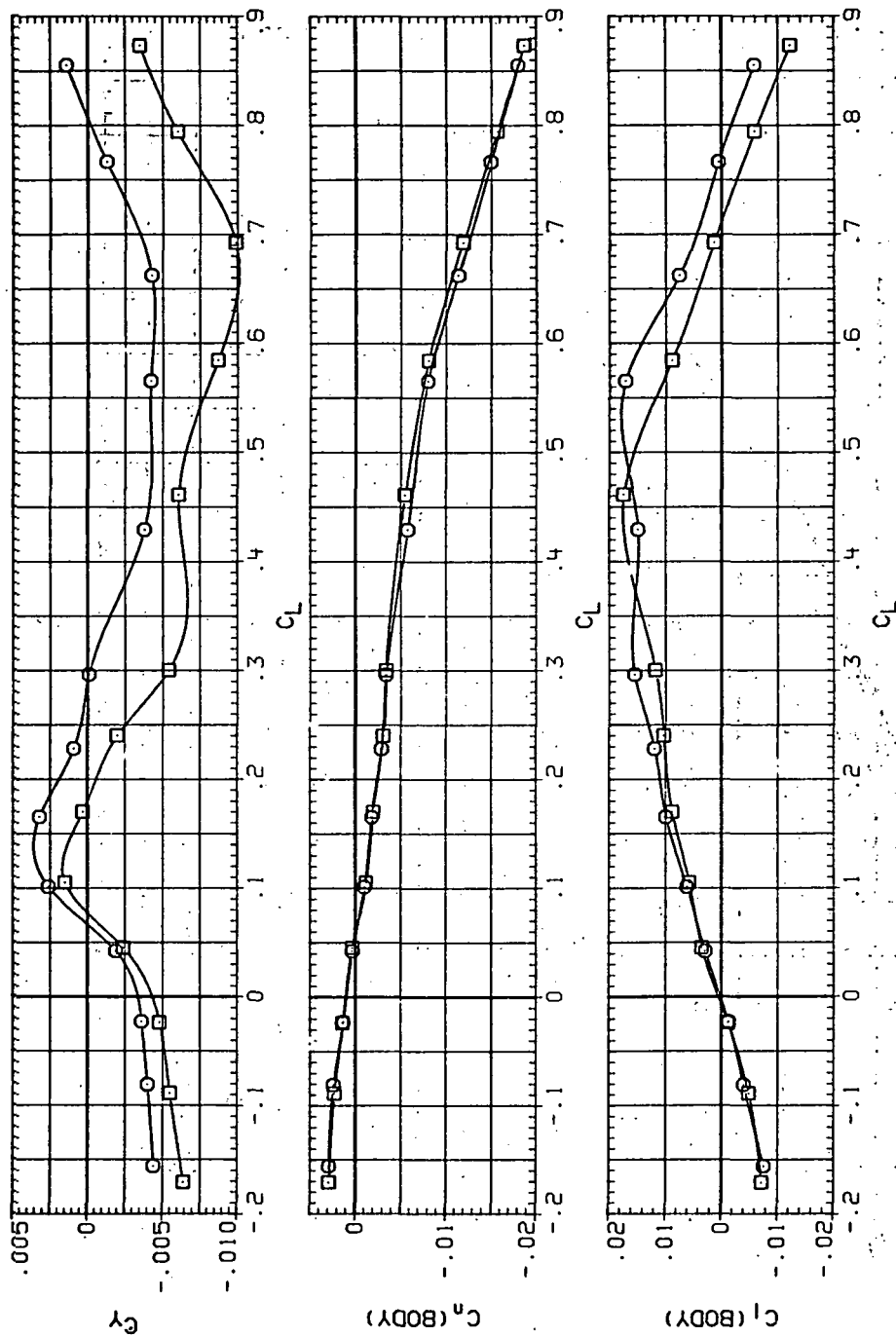


(d) L/D vs C_L .

Figure 63. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR188 O 7M50B (STEEL)
 RJR234 □ 7M50B (STEEL)

RV/L Q(NSM)
 6.230 16.400
 8.200 21.200



(e) C_γ , C_n and C_q vs C_L .

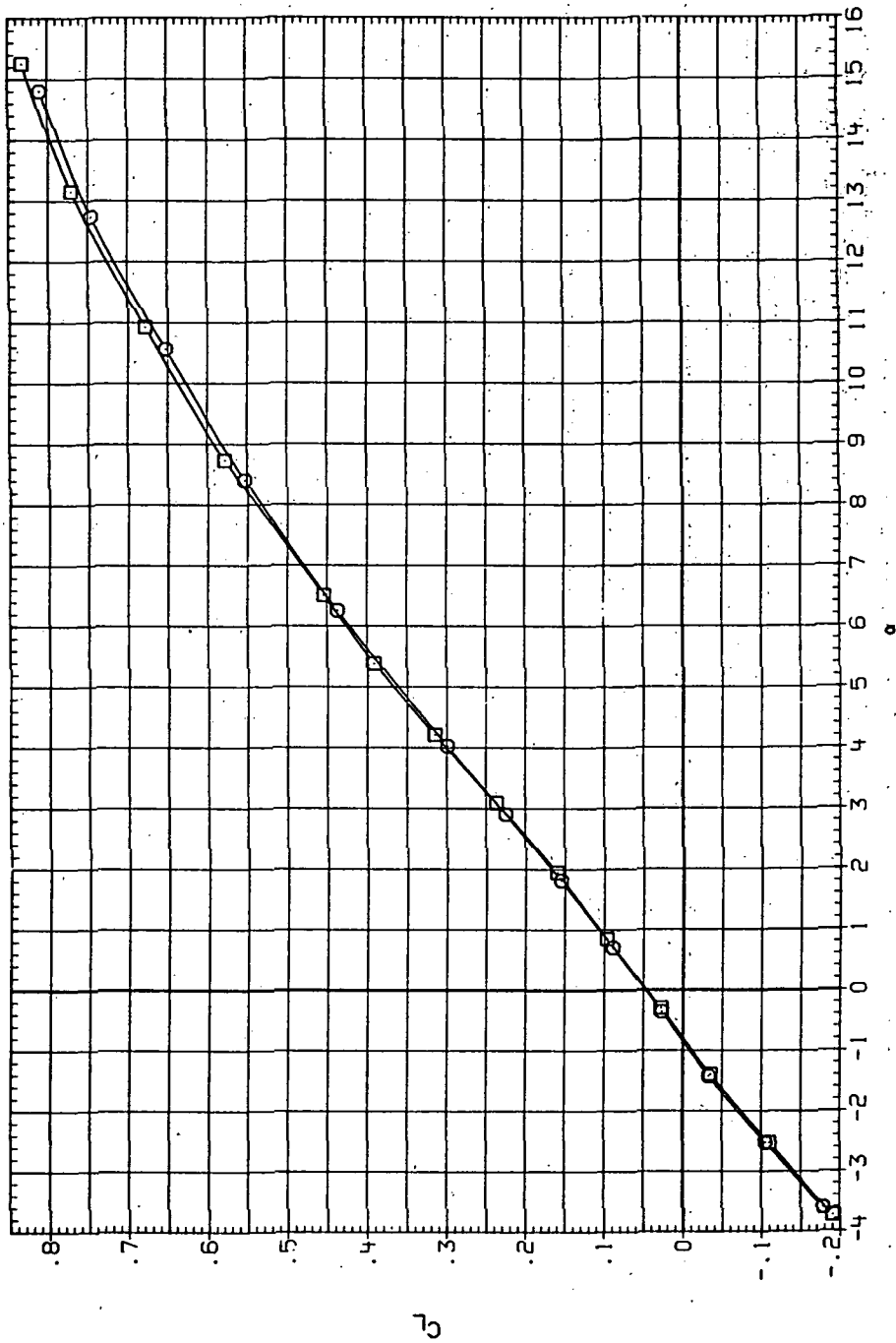
Figure 63. — Concluded.

DATA SET SYMBOL
RJR189
RJR235

CONFIGURATION
74508 (STEEL)
74508 (STEEL)

RM/L
6.230
8.200

Q(NSH)
17.070
22.800

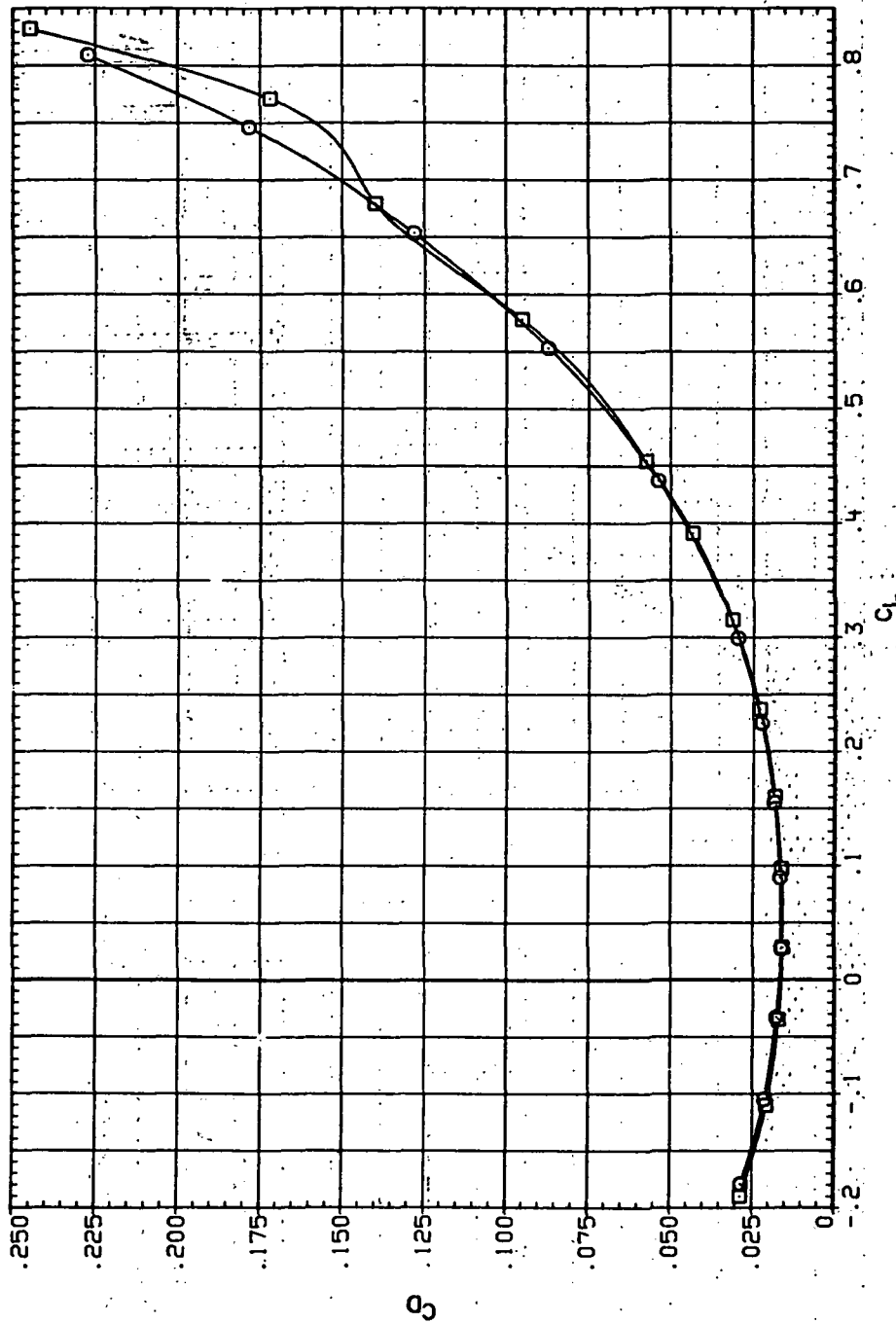


(a) C_L vs α .

Figure 64.—Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.2$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R.JR189 7450B (STEEL)
 R.JR235 7450B (STEEL)

RV/L Q (NSM)
 5.230 17,000
 8.200 22,800

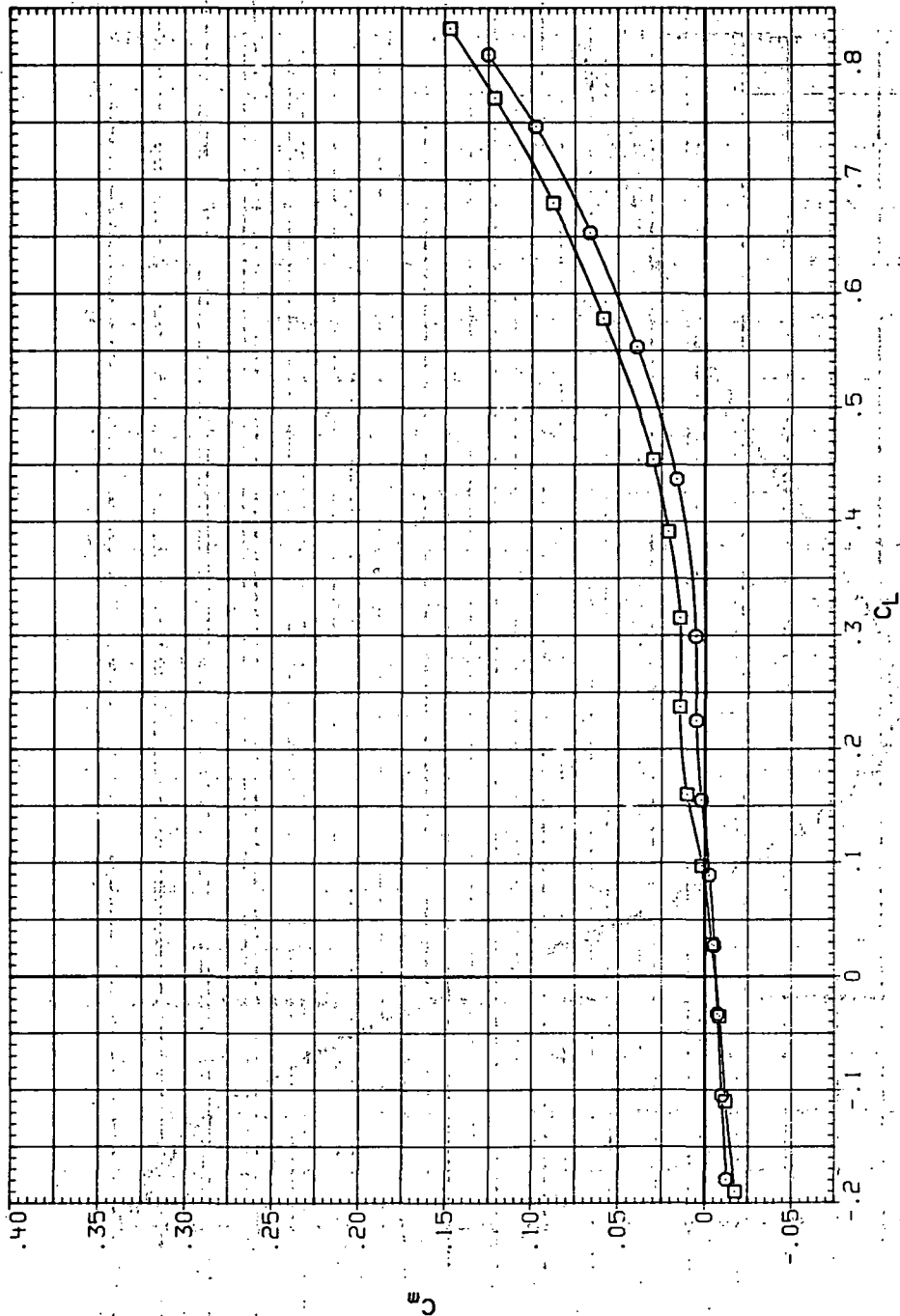


(b) C_D vs C_L

Figure 64. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR189 ○ 7W50B (STEEL)
 RJR235 □ 7W50B (STEEL)

RN/L Q(NSM)
 6.230 17.000
 8.200 22.800

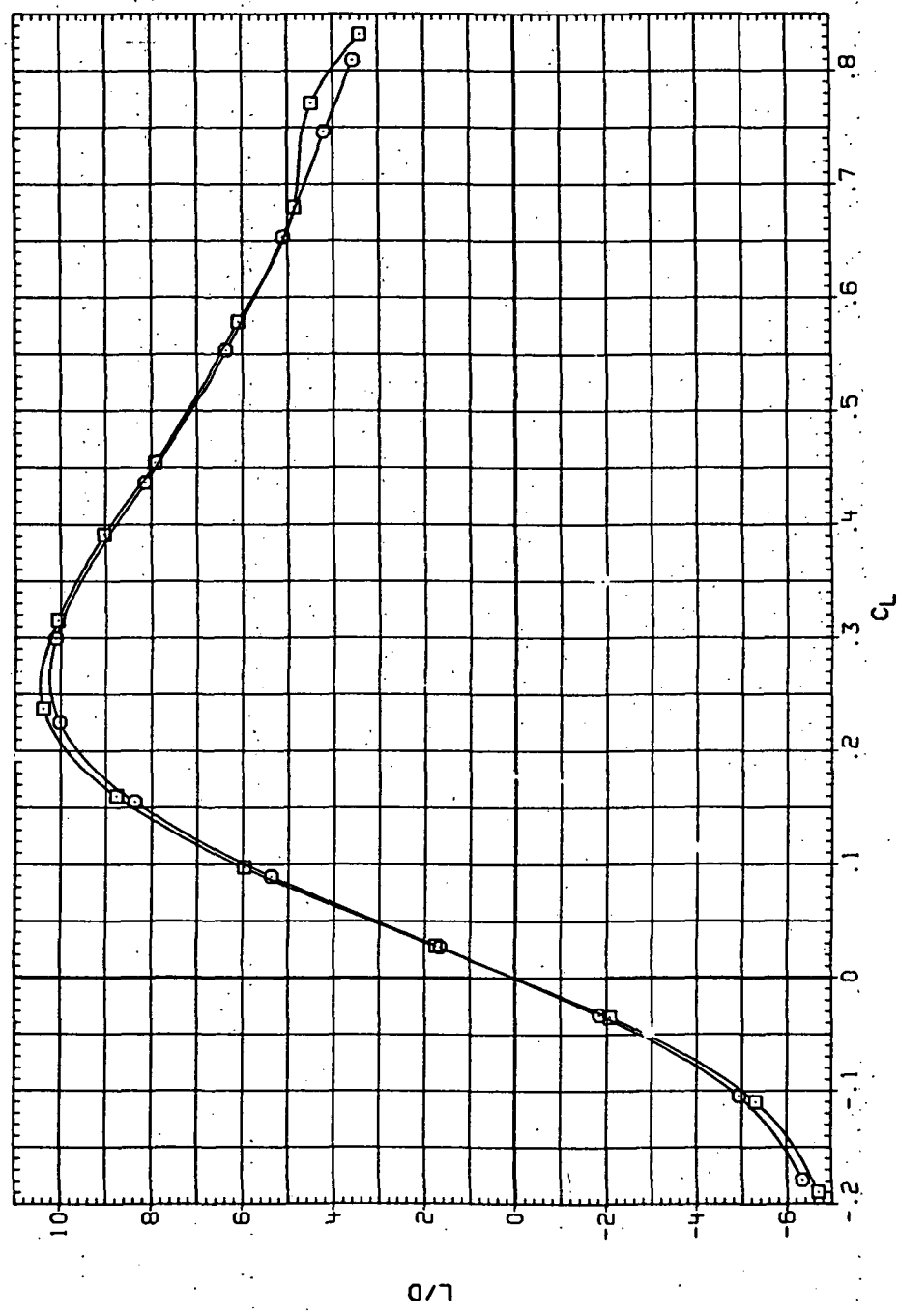


(c) C_m vs C_L .

Figure 64.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR189 7450B (STEEL)
 RJR235 7450B (STEEL)

RN/L Q(NSH)
 6.230 17.000
 8.200 22.800

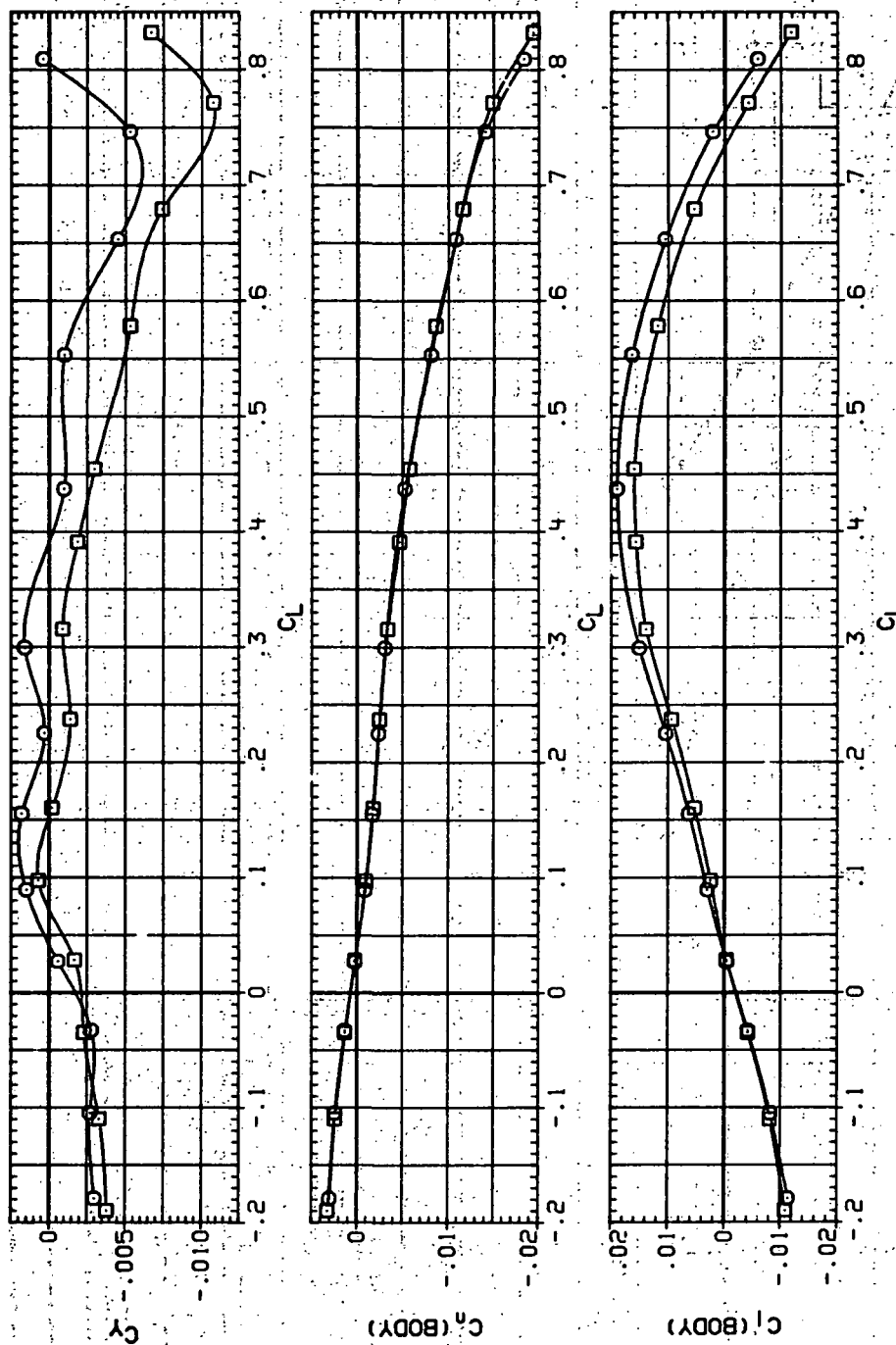


(d) L/D vs C_L .

Figure 64.-- Continued.

DATA SET SYMBOL CONFIGURATION
RJR189 74508 (STEEL)
RJR235 74508 (STEEL)

RN/L Q(NSM)
6.230 17.000
8.200 22.800

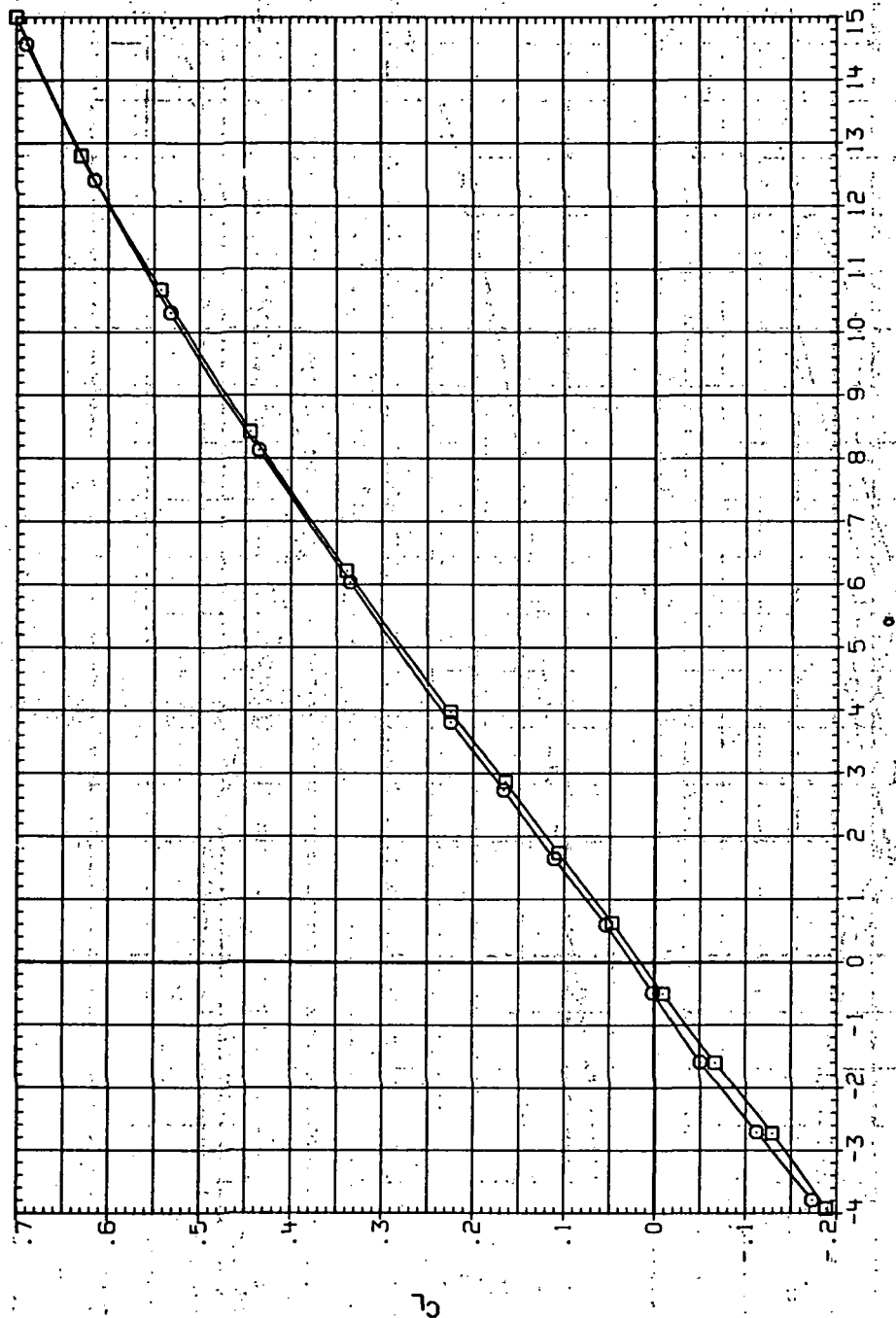


(e) C_Y , C_n and C_l vs C_L .

Figure 64.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR190 7450B (STEEL)
 RJR236 7450B (STEEL)

RM/L 18 01NE 11
 6.230 18.600
 8.200 24.400

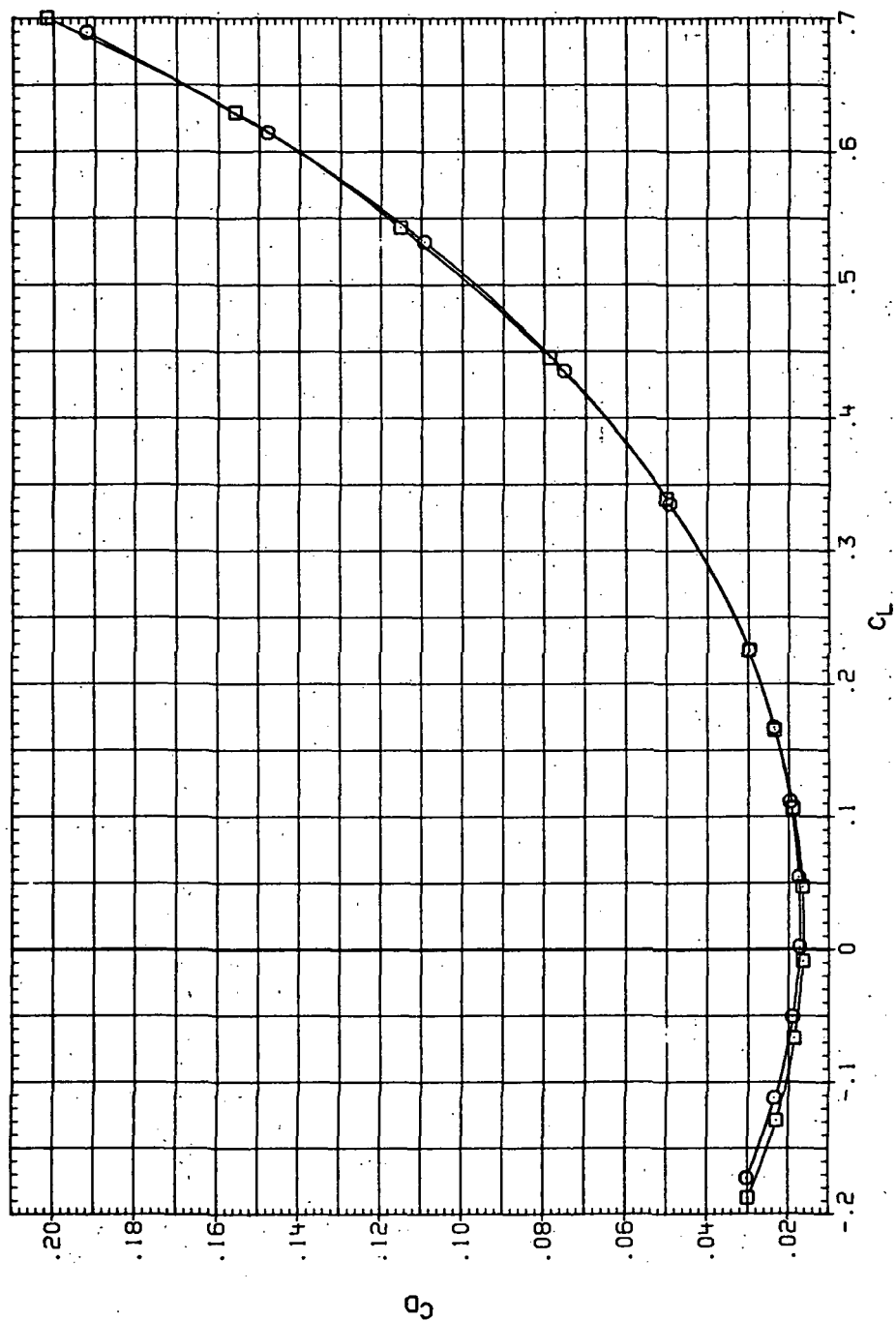


(a) C_L vs α .

Figure 65. Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 1.6$ and the NACA 65A204-airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR190 ○ 7H508 (STEEL)
 RJR236 □ 7H508 (STEEL)

RV/L Q(NSH)
 6.230 18.600
 8.200 24.400

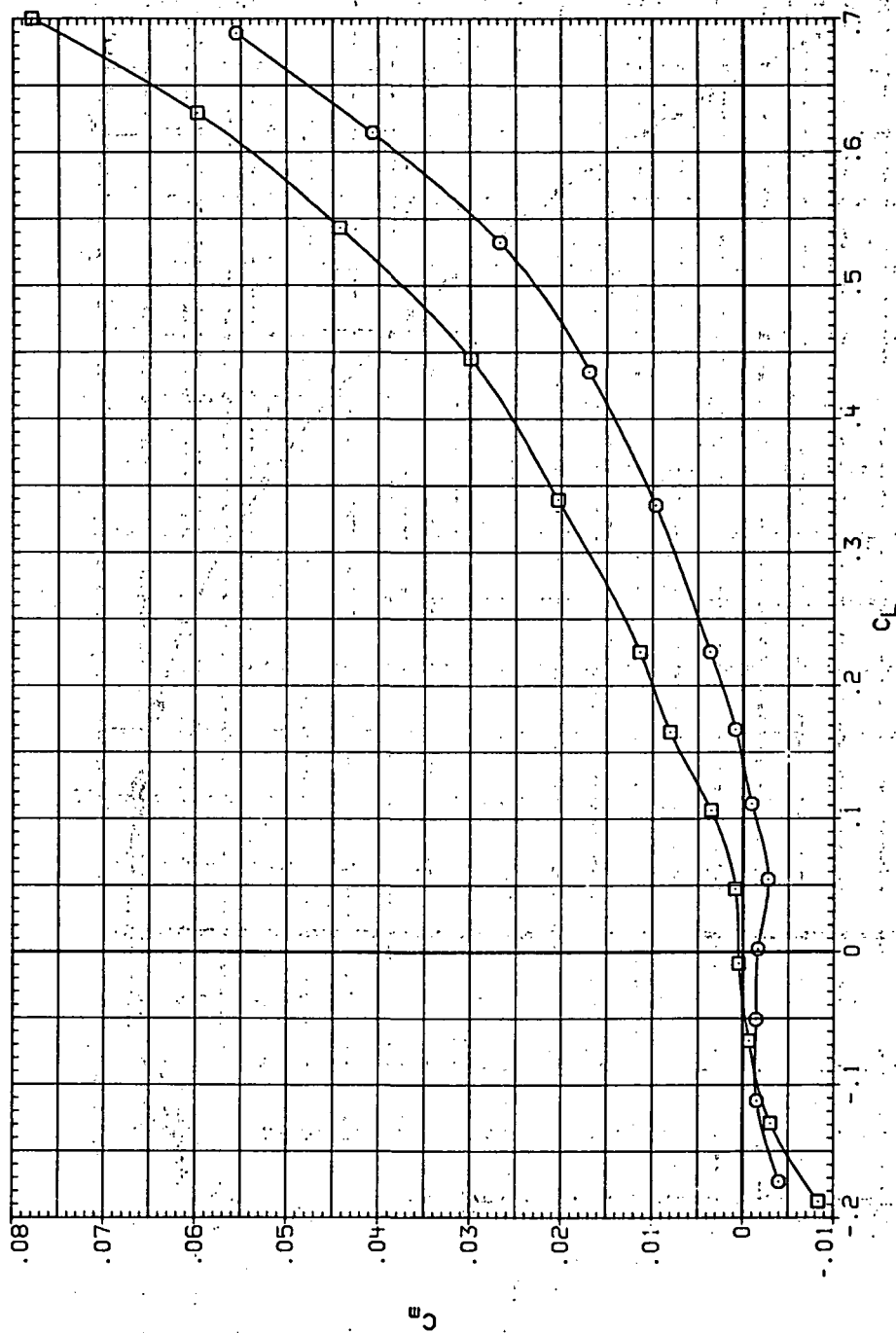


(b) C_D vs C_L .

Figure 65.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR190 ○ 74508 (STEEL)
 RJR236 □ 74508 (STEEL)

RN/L Q (NSM)
 8.230 18.600
 8.200 24.400

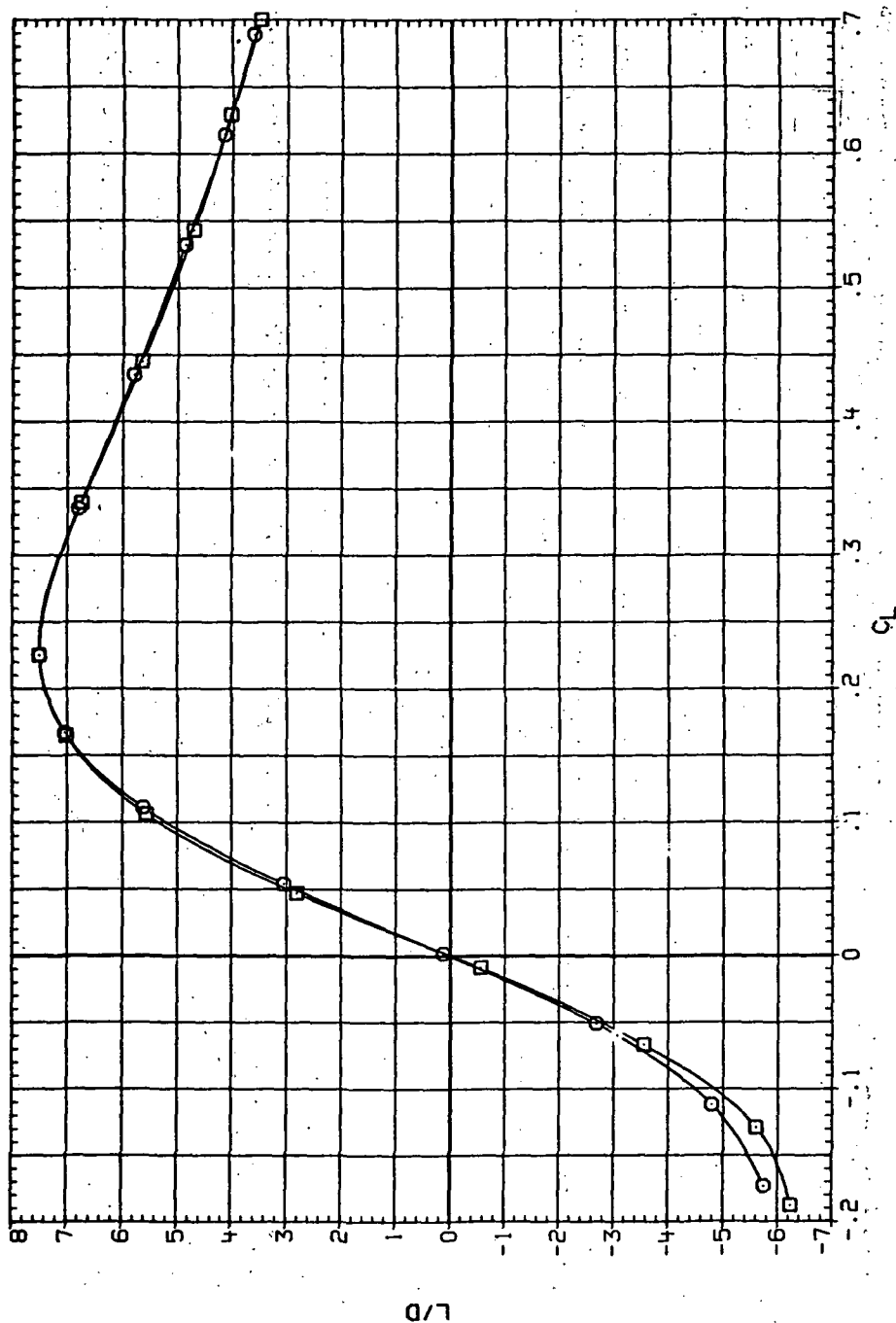


(c) C_m vs C_L

Figure 65.— Continued.

DATA SET SYMBOL CONFIGURATION
 R, P190 7450B (STEEL)
 R, R236 7450B (STEEL)

RN/L Q(NSM)
 8.230 18,600
 8.200 24,400

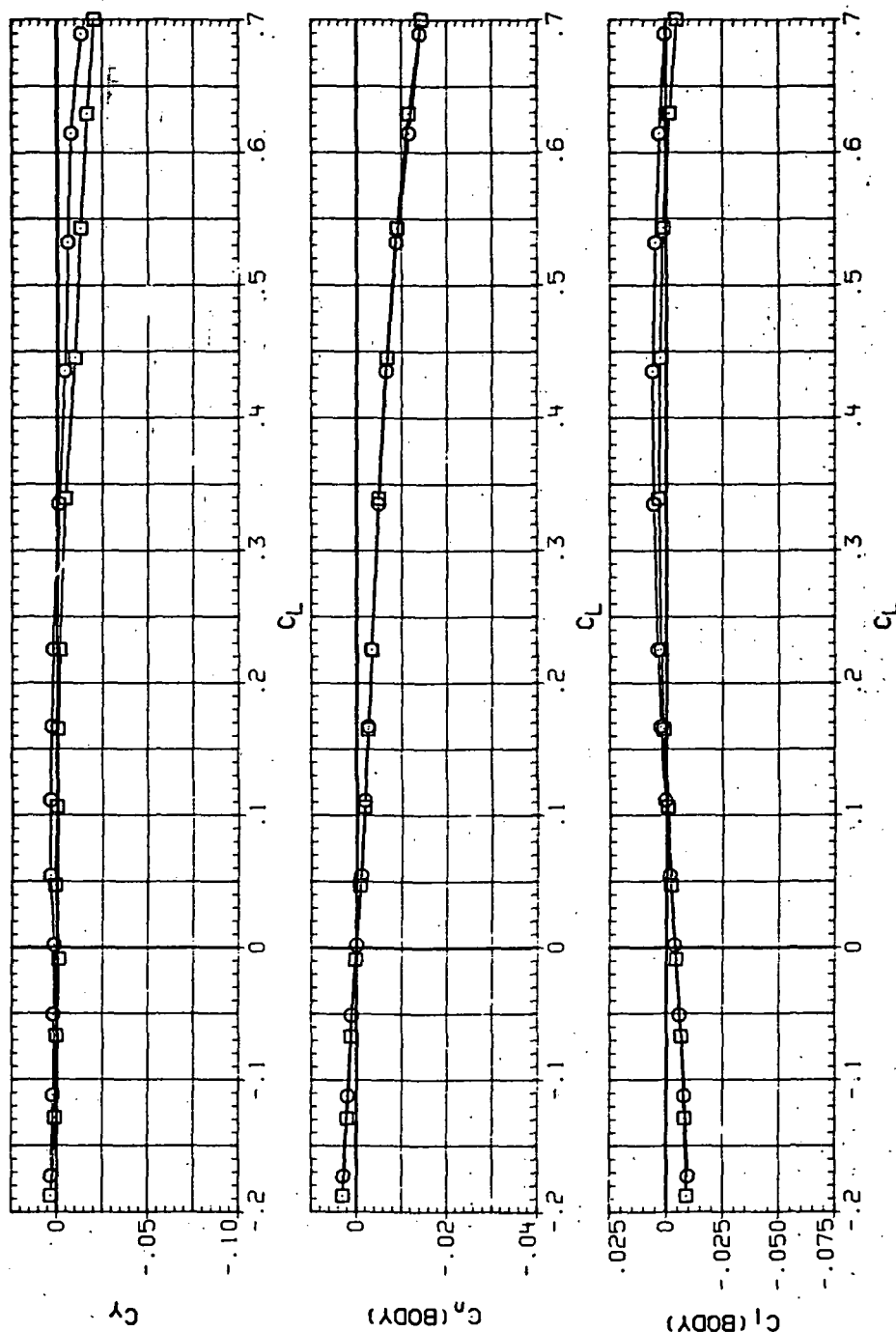


(d) L/D vs C_L .

Figure 65. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR190 74508 (STEEL)
 RJR236 74508 (STEEL)

RN/L 0 (NSH)
 6.230 18.600
 8.200 24.400



(e) C_Y , C_n and C_l vs C_L .

Figure 65. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR191 $\square$ 74508 (STEEL)
 RJR237 $\square$ 74508 (STEEL)

RN/L Q (NSM)
 6.230 18,500
 8.200 24,700

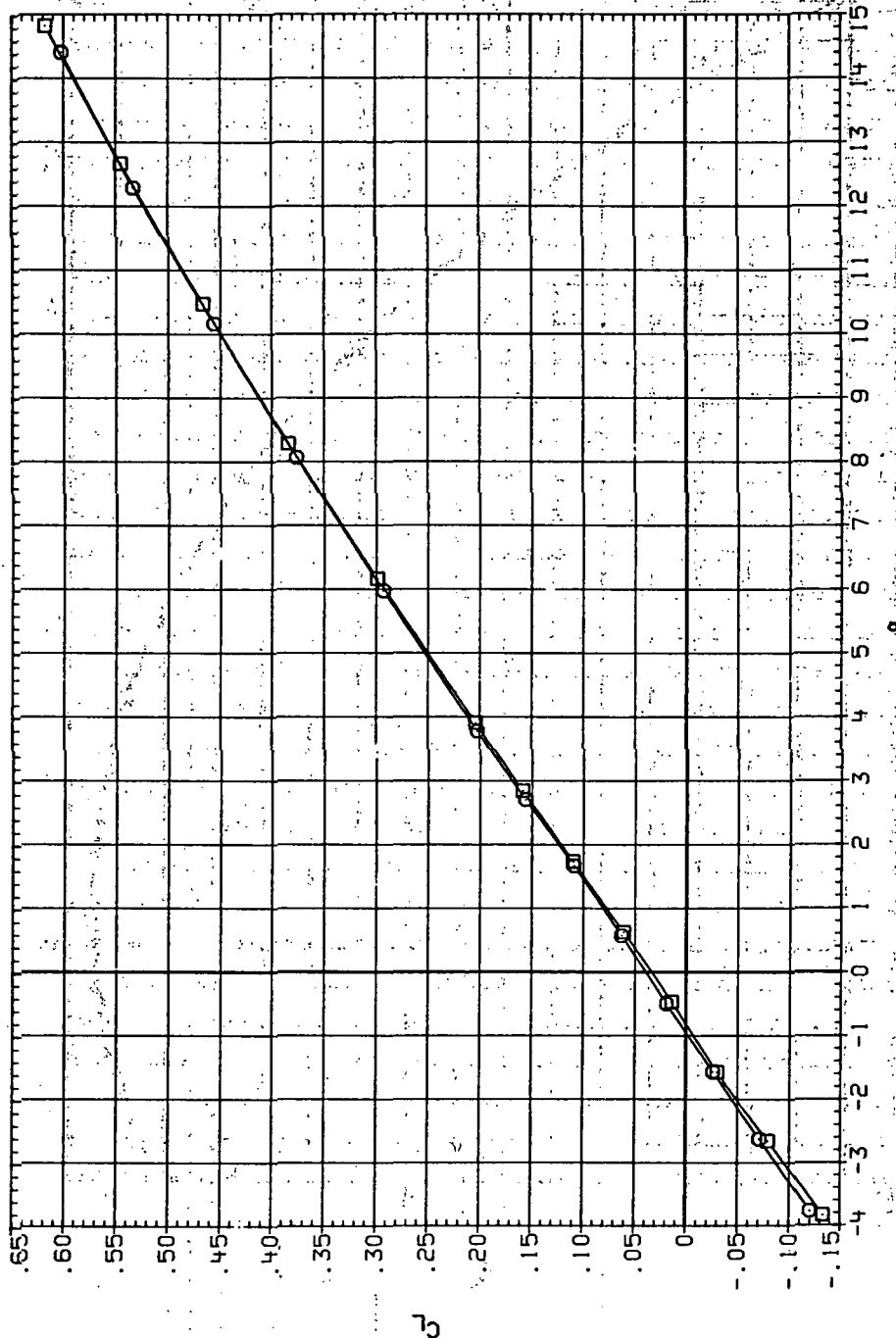
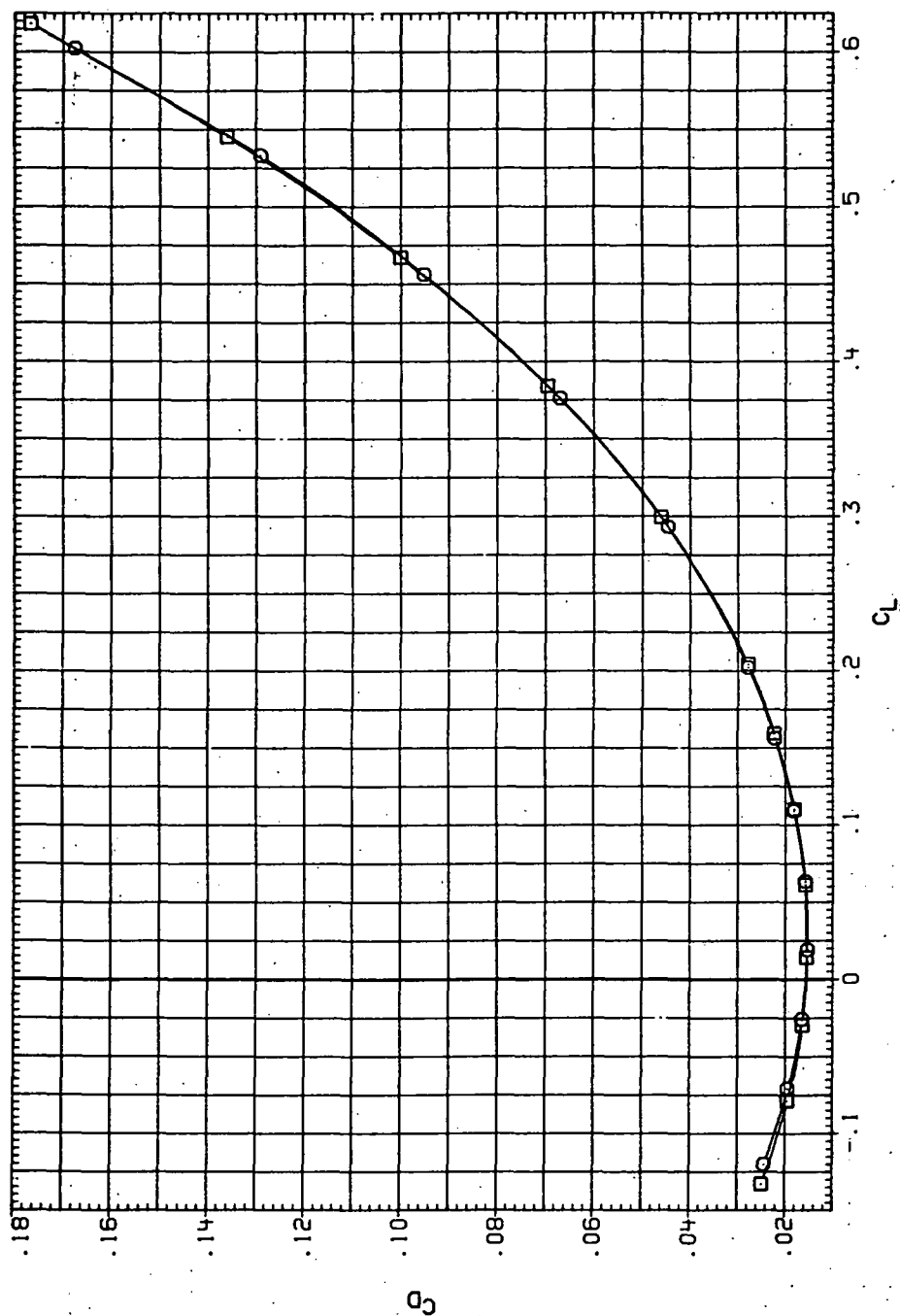


Figure 66. — Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 50^\circ$, $M = 2.0$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R4R181 ○ 74508 (STEEL)
 R4R237 □ 74508 (STEEL)

RV/L Q (NSM)
 6.230 18.500
 8.200 24.700



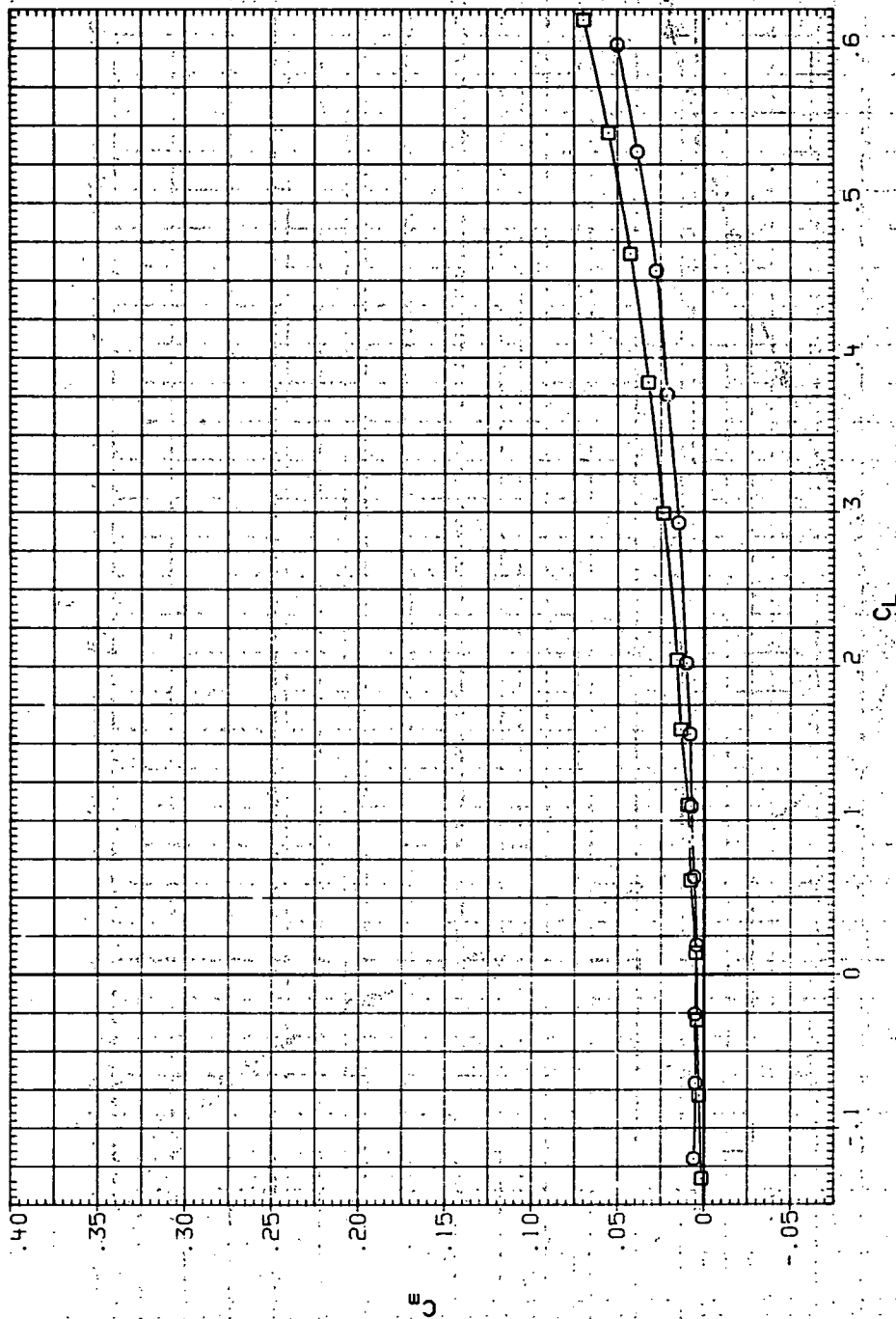
(b) C_D vs C_L .

Figure 66.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR191 $\square$ 7450B (STEEL)
 RJR237 $\square$ 7450B (STEEL)

RV/L Q (NSH)
 6.230 18,500
 8.200 24,700

10.0 30,000

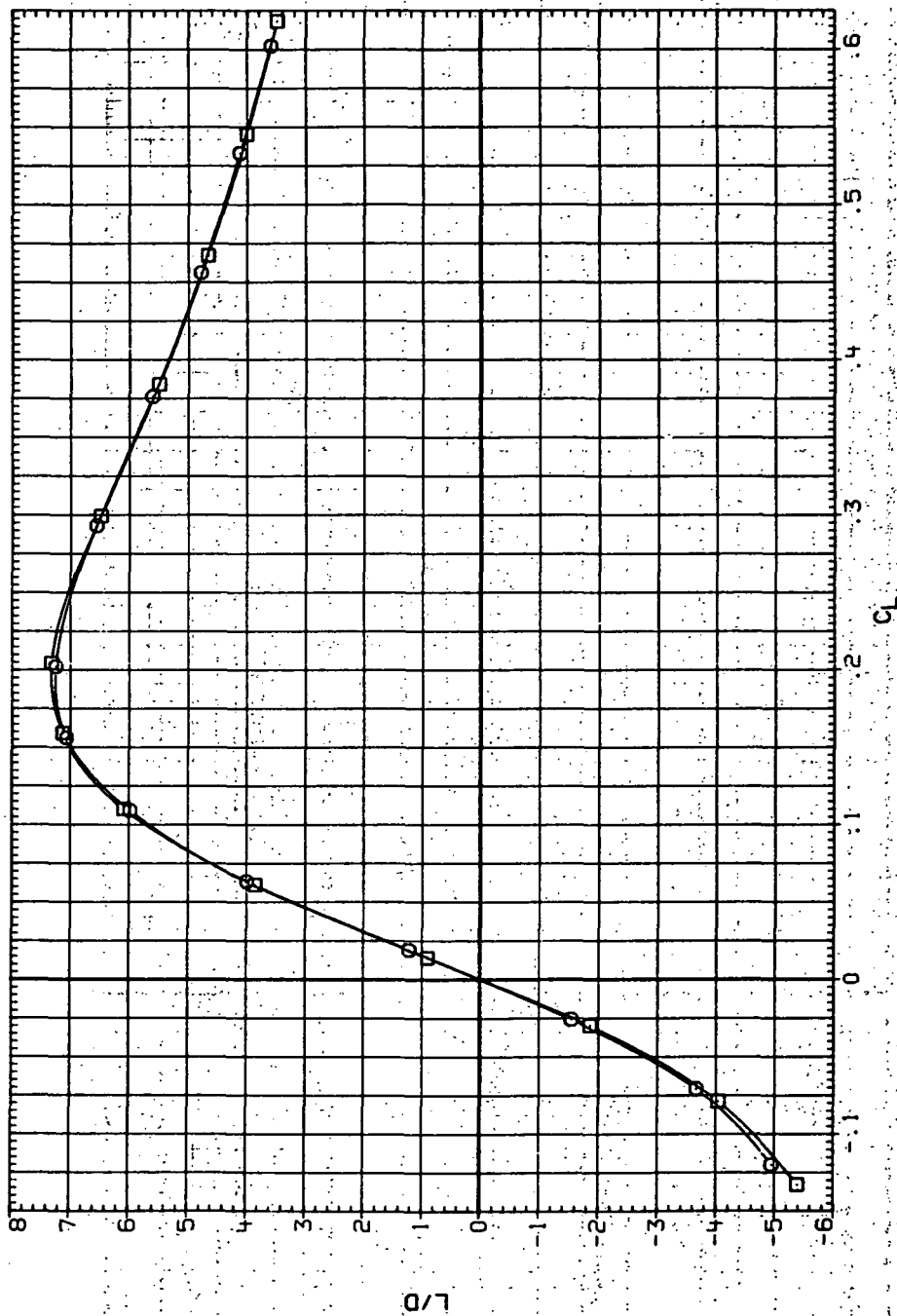


(c) C_m vs C_L

Figure 66.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR191 7450B (STEEL)
 RJR237 7450B (STEEL)

RN/L Q(NSH)
 6.230 18.500
 8.200 24.700

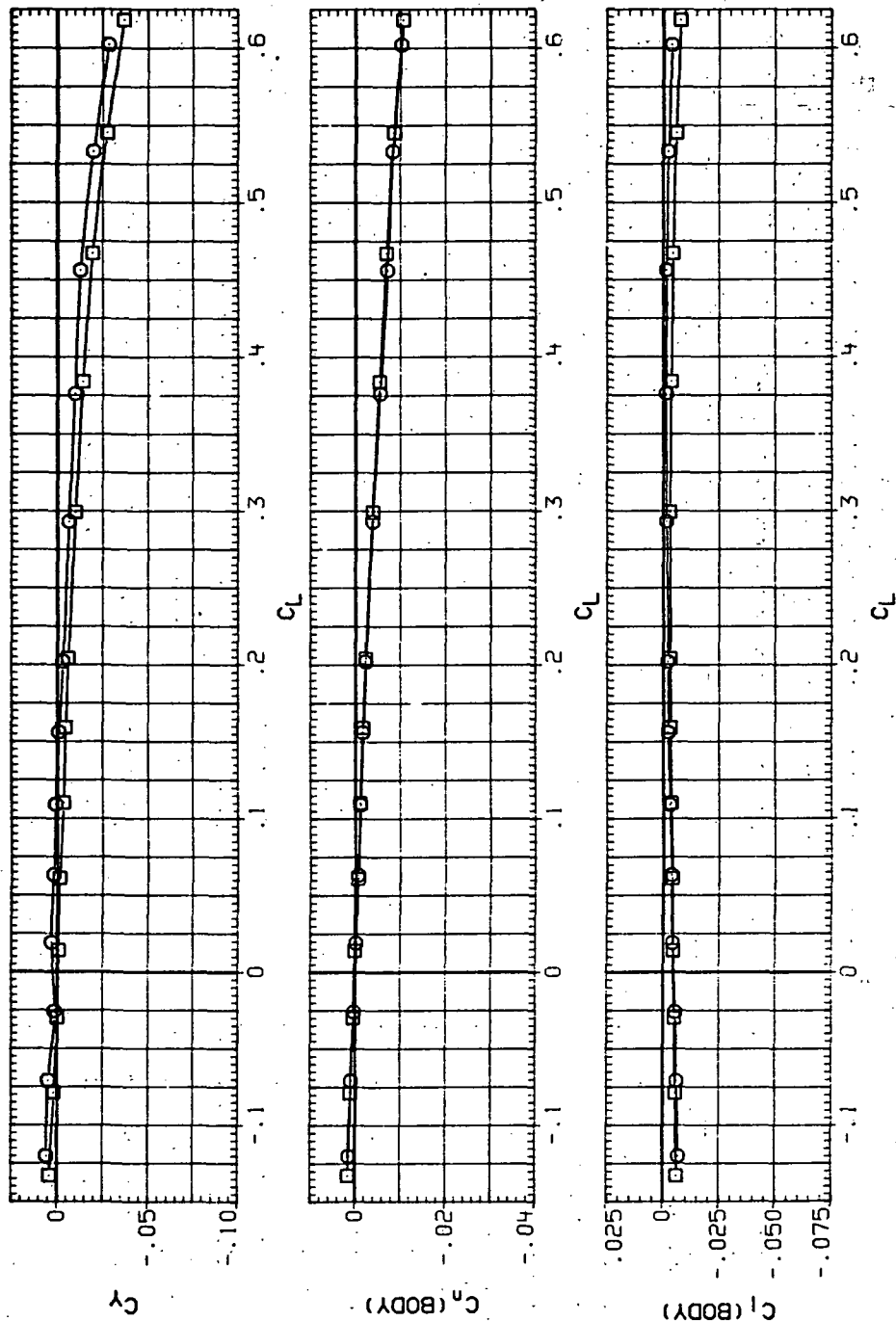


(d) L/D vs C_L

Figure 66. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR191 7M50B (STEEL)
 RJR237 7M50B (STEEL)

RM/L 0 (NSM)
 6.230 18.500
 8.200 24.700

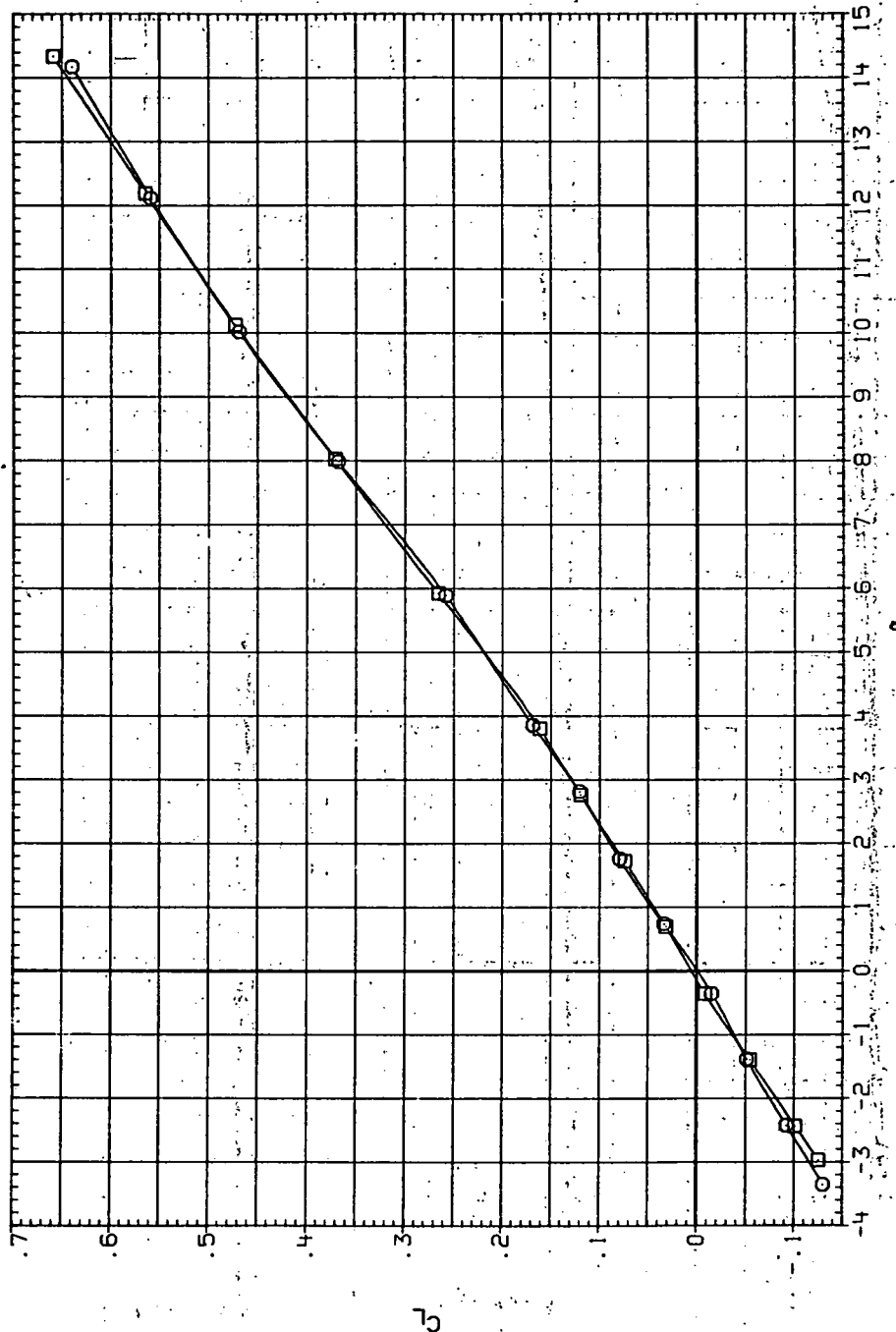


(e) C_Y , C_n and C_l vs C_L .

Figure 66.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR193 $\square$ 74558 (STEEL)
 RJR239 $\square$ 74558 (STEEL)

RN/L $\square$ 0 (NSM)
 6.230 7.480
 8.200 9.900

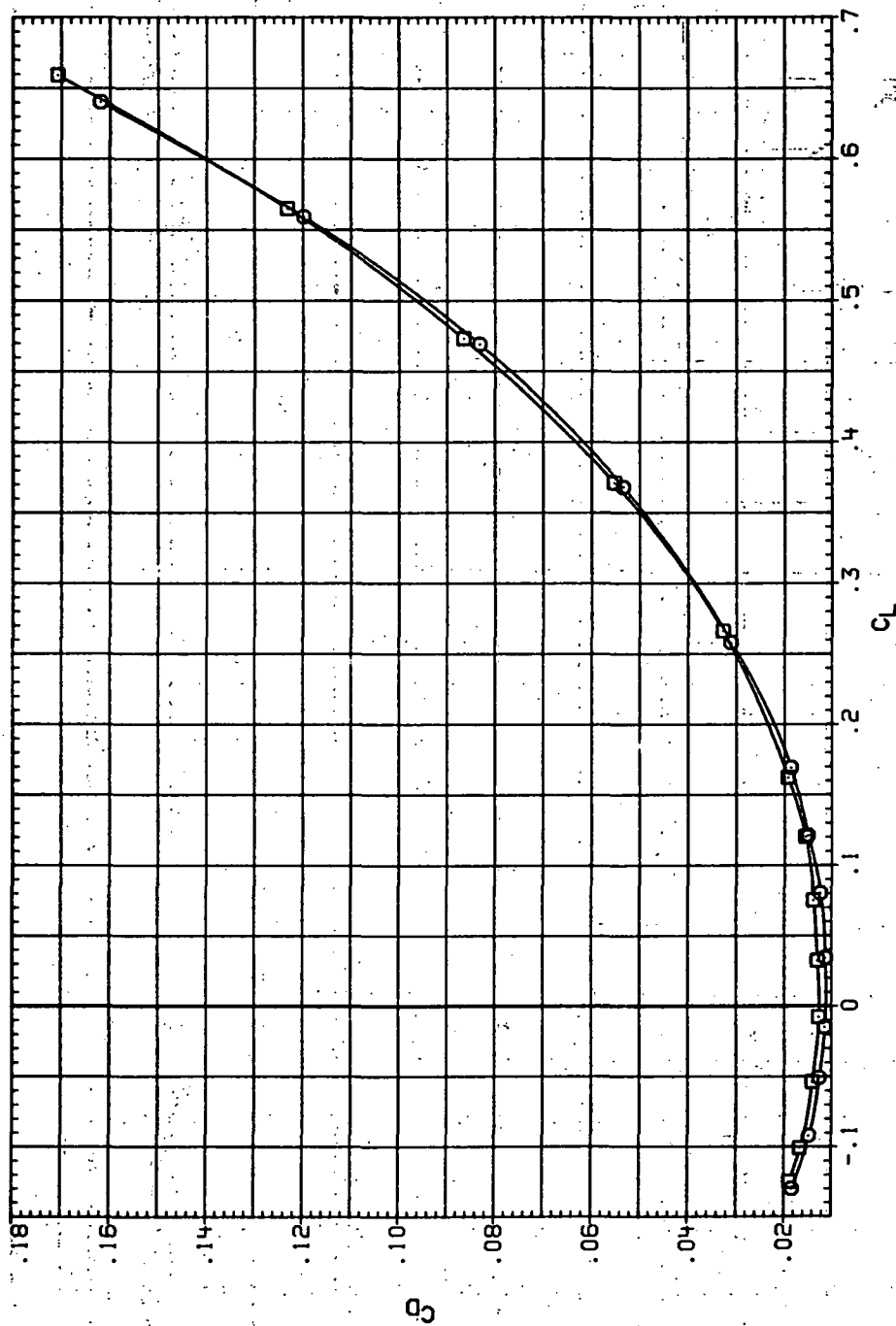


(a) C_L vs α .

Figure 67. Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.4$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R4193 74558 (STEEL)
 R4239 74558 (STEEL)

RV/L Q (INCH)
 6.230 7.480
 8.200 9.900

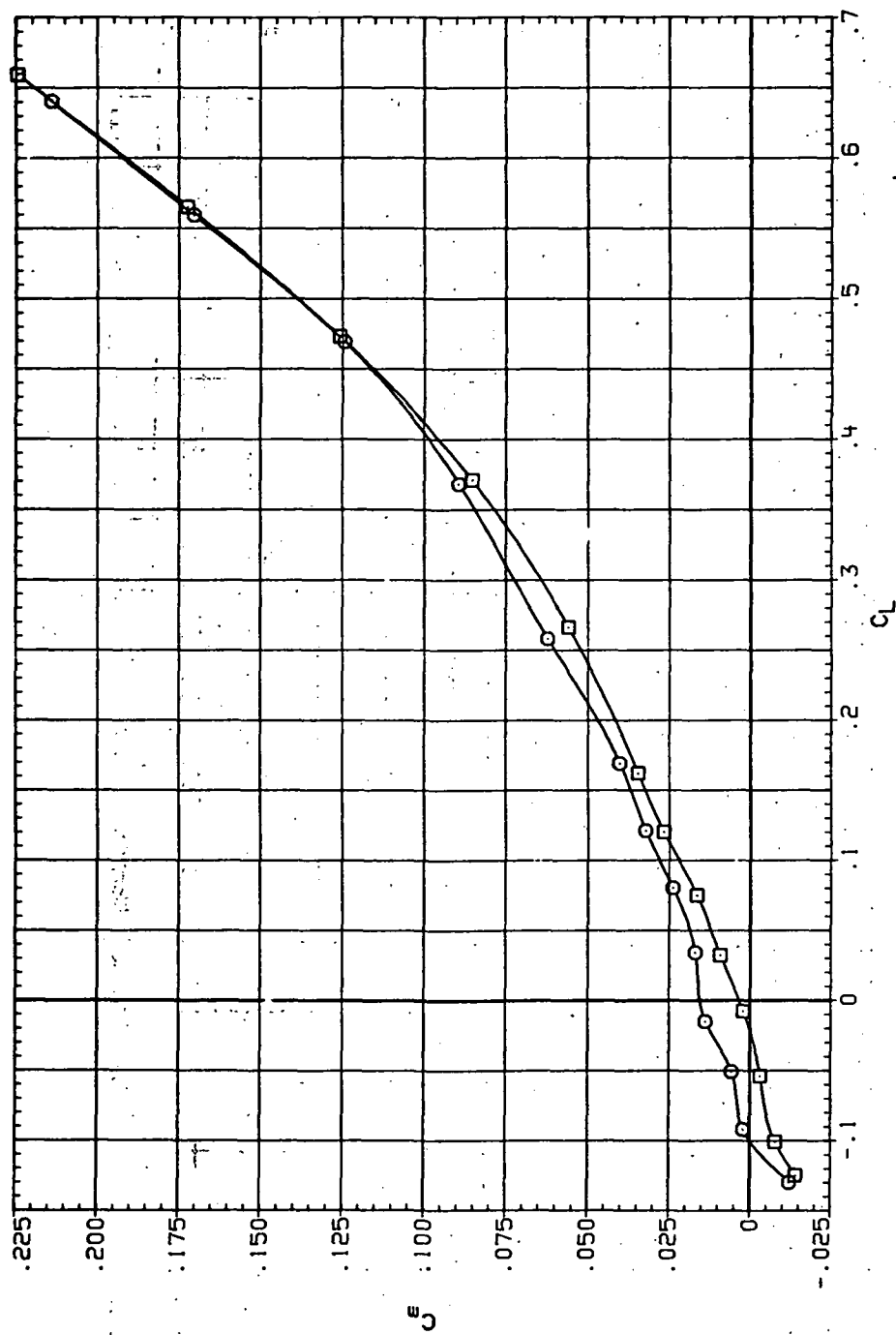


(b) C_D vs C_L

Figure 67.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR193 $\square$ 74558 (STEEL)
 RJR239 $\square$ 74558 (STEEL)

RM/L Q (INSH)
 6.230 7.480
 8.200 9.900

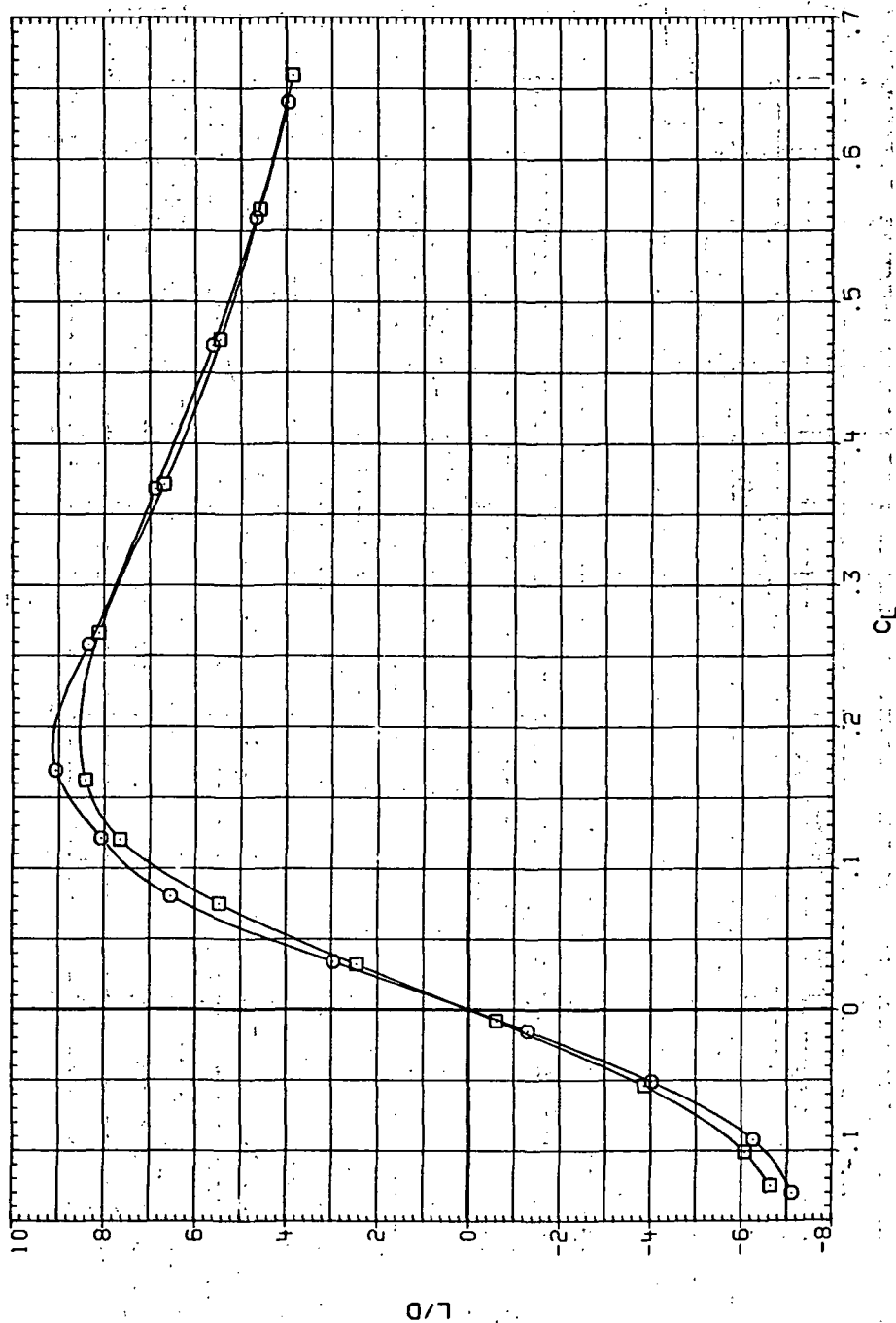


(c) C_m vs C_L .

Figure 67.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR193 7W55B (STEEL)
 RJR239 7W55B (STEEL)

RM/L Q (INSH)
 6.230 7.480
 8.200 9.900

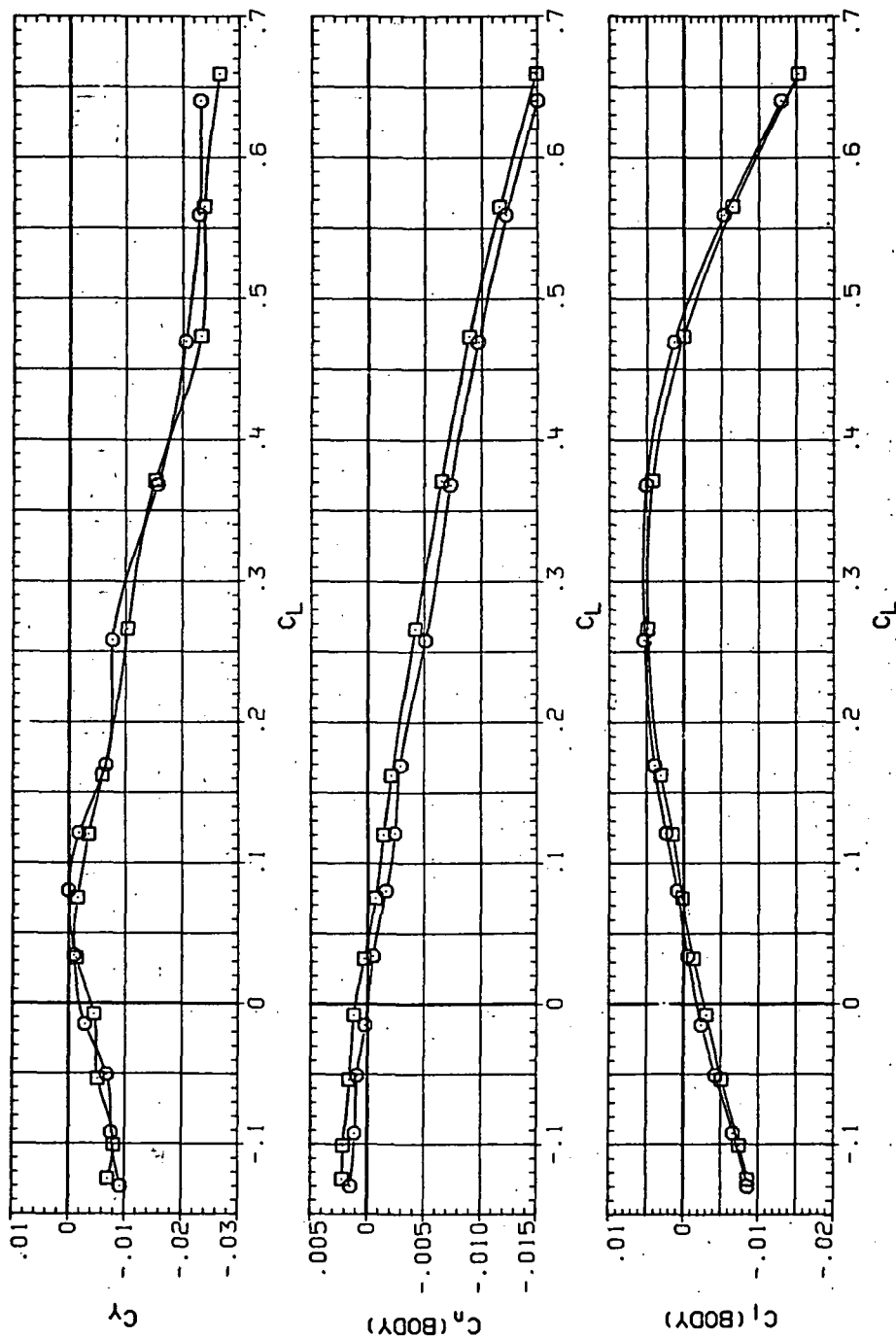


(d) L/D vs C_L .

Figure 67. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR193 74558 (STEEL)
 RJR239 74558 (STEEL)

RR/L Q (INSH)
 6.230 7.480
 8.200 9.900

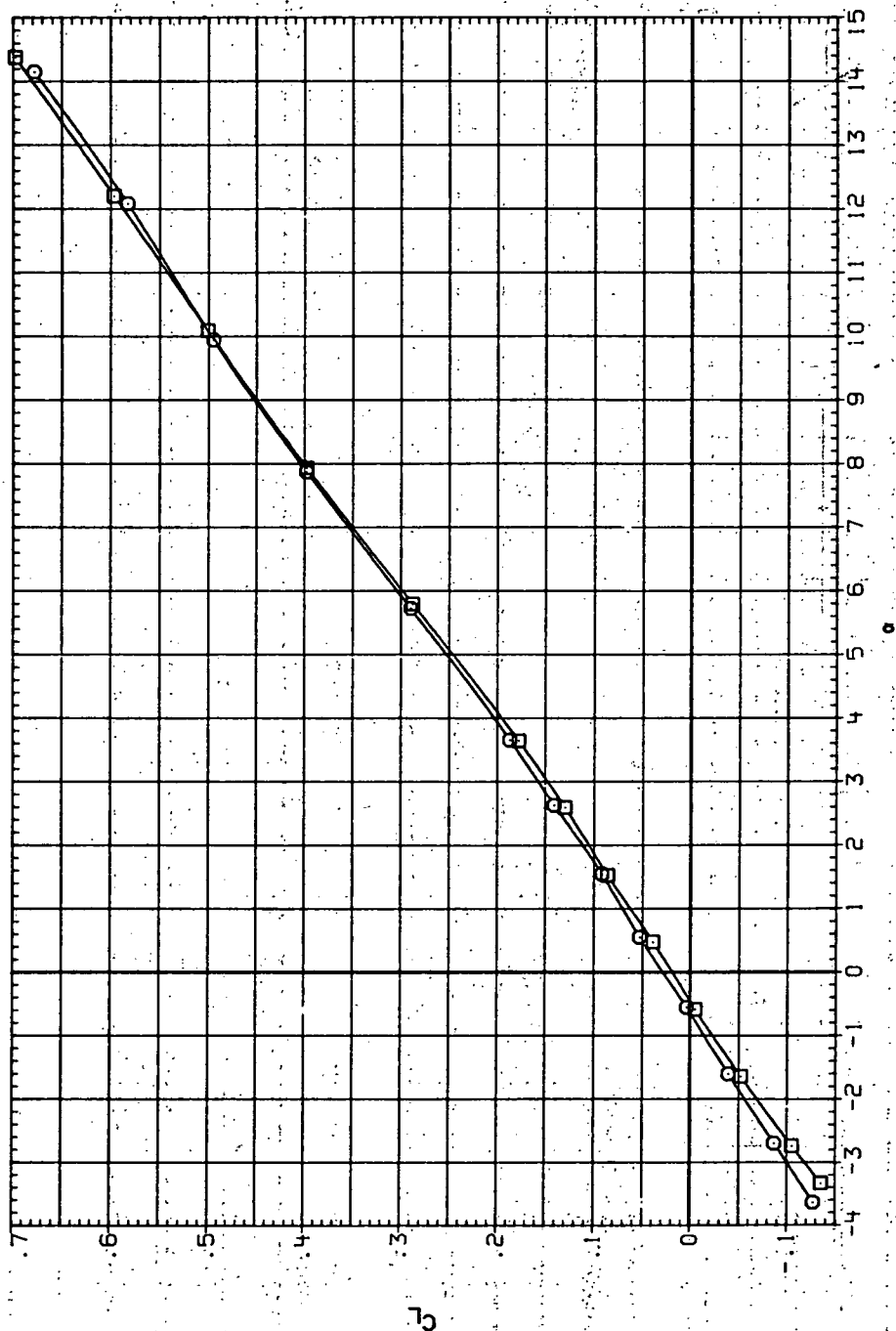


(e) C_Y , C_n and C_l vs C_L .

Figure 67.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR194 $\square$ 7405B (STEEL)
 RJR240 $\circ$ 7405B (STEEL)

RV/L Q (NSH)
 6.230 10.600
 6.200 14.100

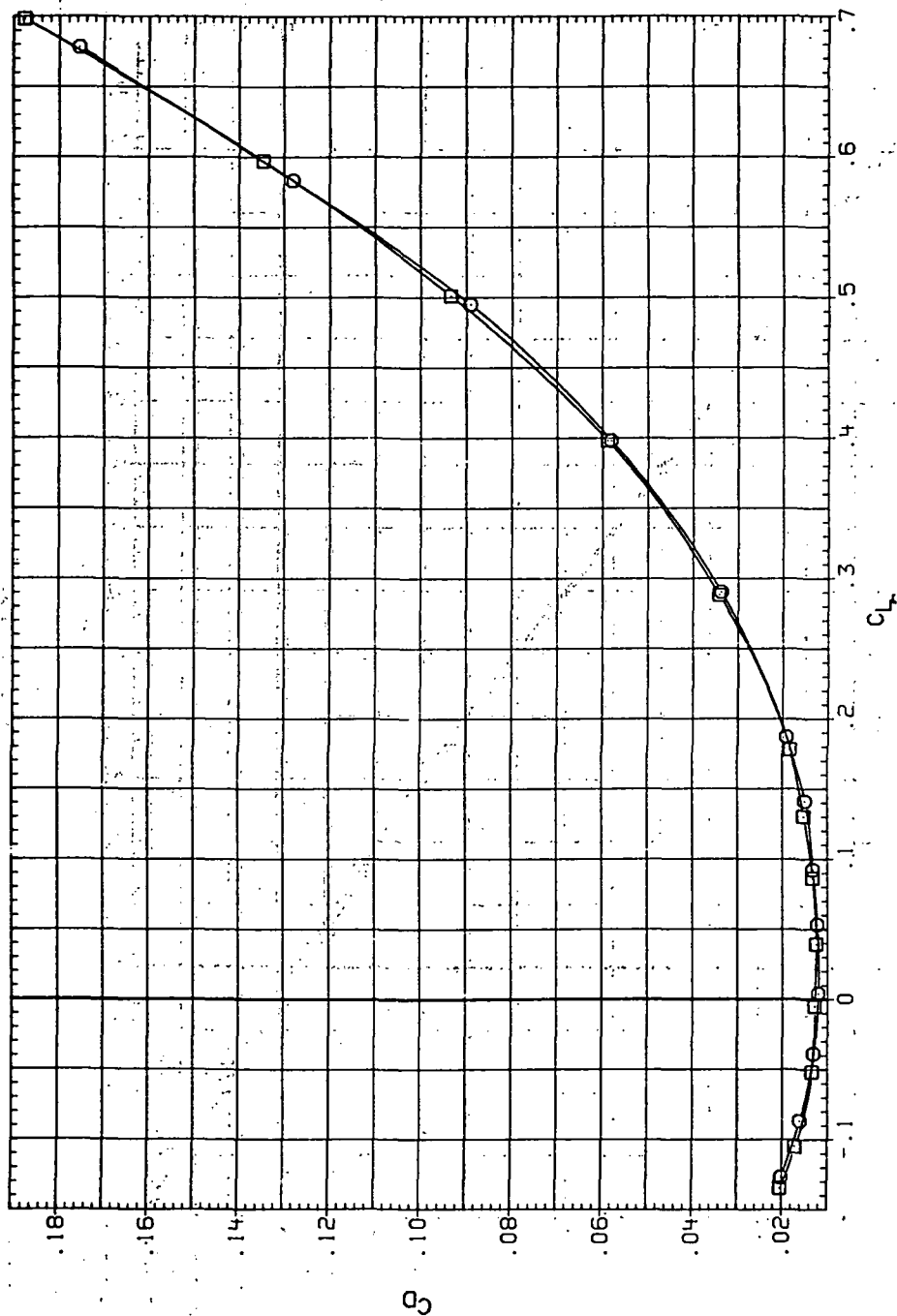


(a) C_L vs α .

Figure 68.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUR19M 74558 (STEEL)
 RUR240 74558 (STEEL)

RV/L Q(NSM)
 6.230 10.600
 8.200 14.100

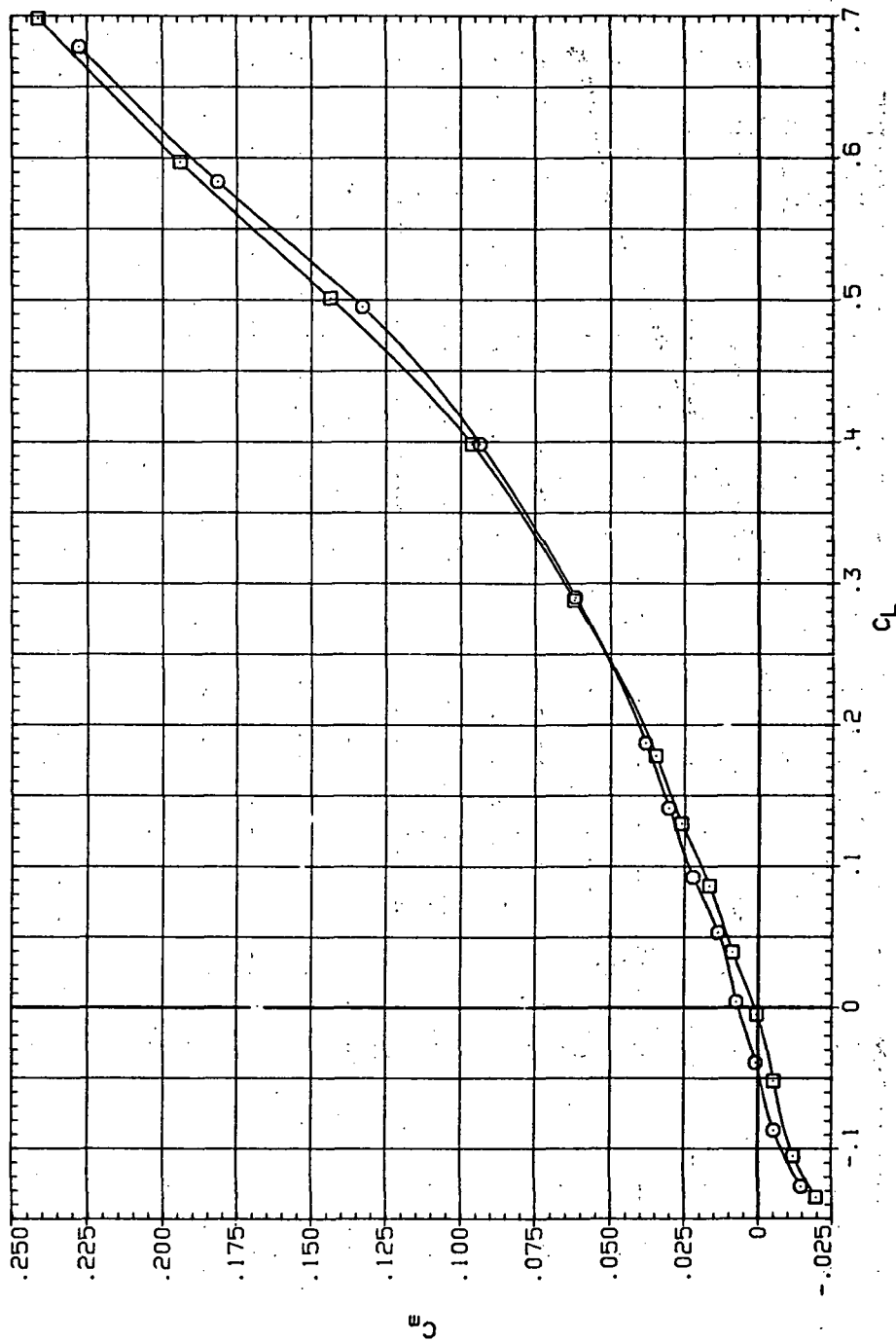


(b) C_D vs C_L .

Figure 68.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR194 74558 (STEEL)
 RJR240 74558 (STEEL)

RN/L Q (NSM)
 6.230 10.500
 8.200 14.100

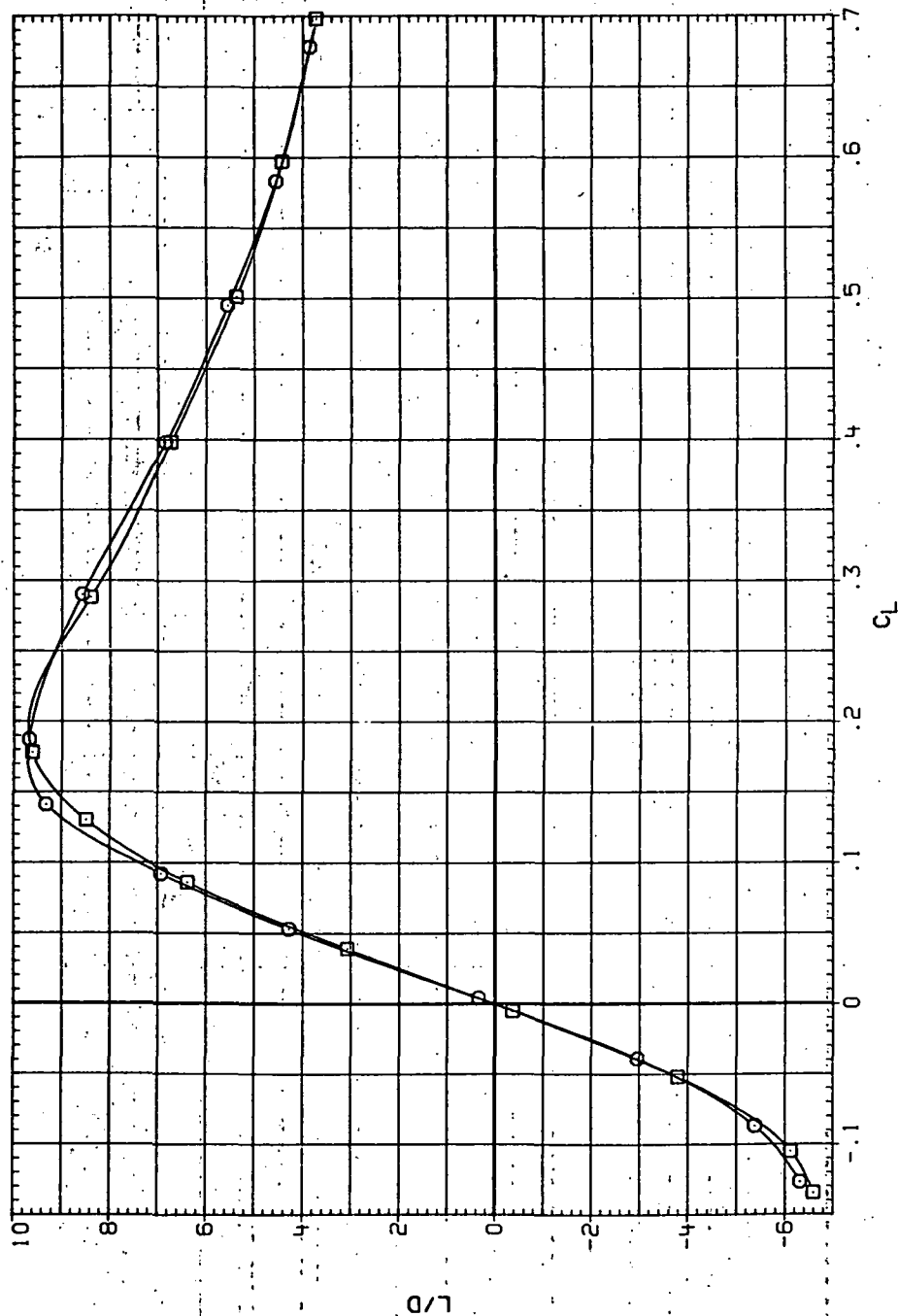


(c) C_m vs C_L .

Figure 68. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR194 ○ 7455B (STEEL)
 RJR240 □ 7455B (STEEL)

RN/L Q(NSH)
 6.230 10.600
 8.200 14.100

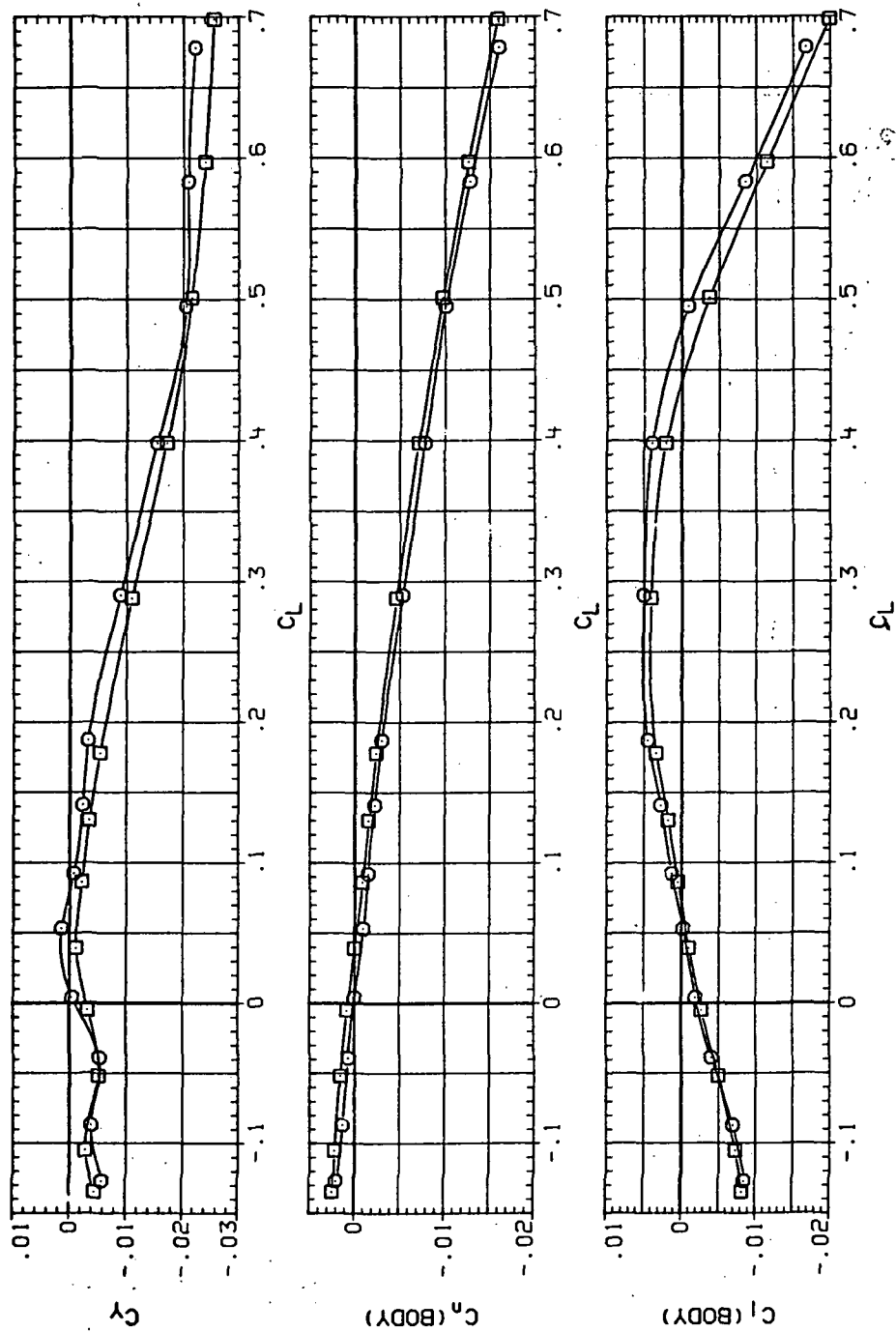


(d) L/D vs C_L .

Figure 68. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJA194 □ 7A558 (STEEL)
 RJA240 □ 7A558 (STEEL)

RM/L O (NSM)
 8.230 10.600
 8.200 14.100



(e) C_Y , C_n and C_l vs C_L .

Figure 68.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR195 74558 (STEEL)
 RJR241 74558 (STEEL)

RN/L Q (IN/H)
 6.230 13.400
 8.200 17.800

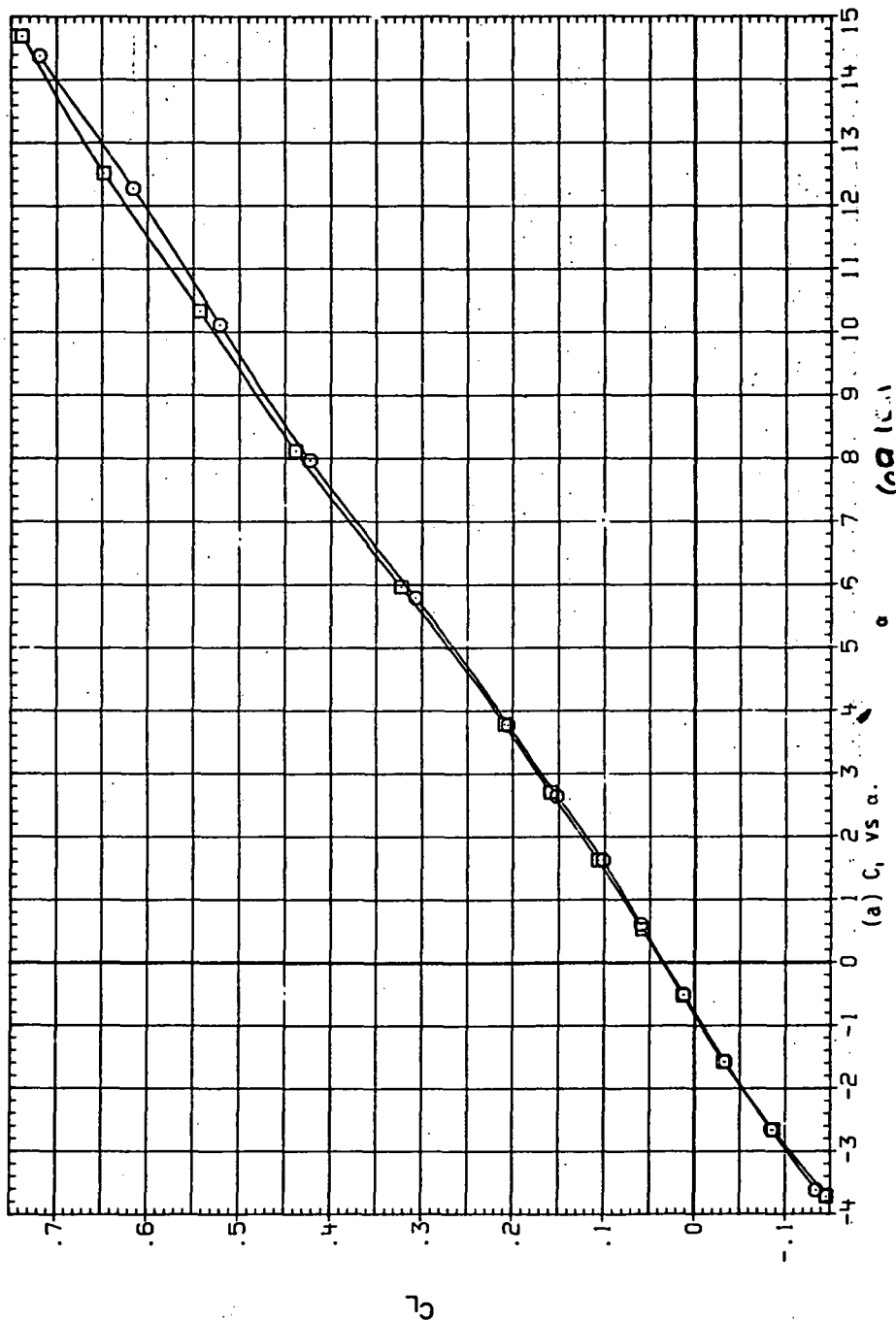
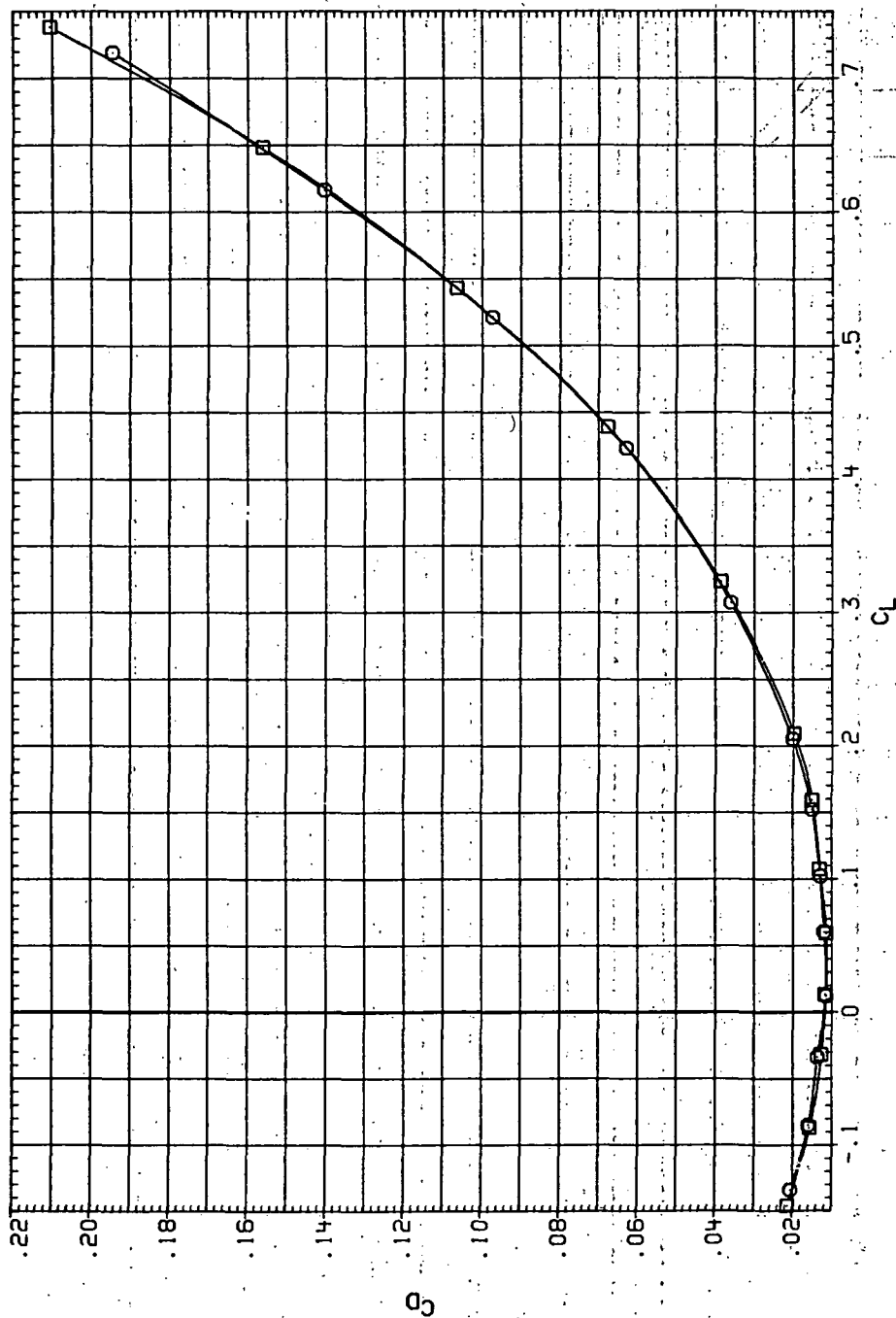


Figure 69.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR195 7455B (STEEL)
 RJR241 7455B (STEEL)

RN/L Q(NSM)
 6.230 13.400
 8.200 17.800

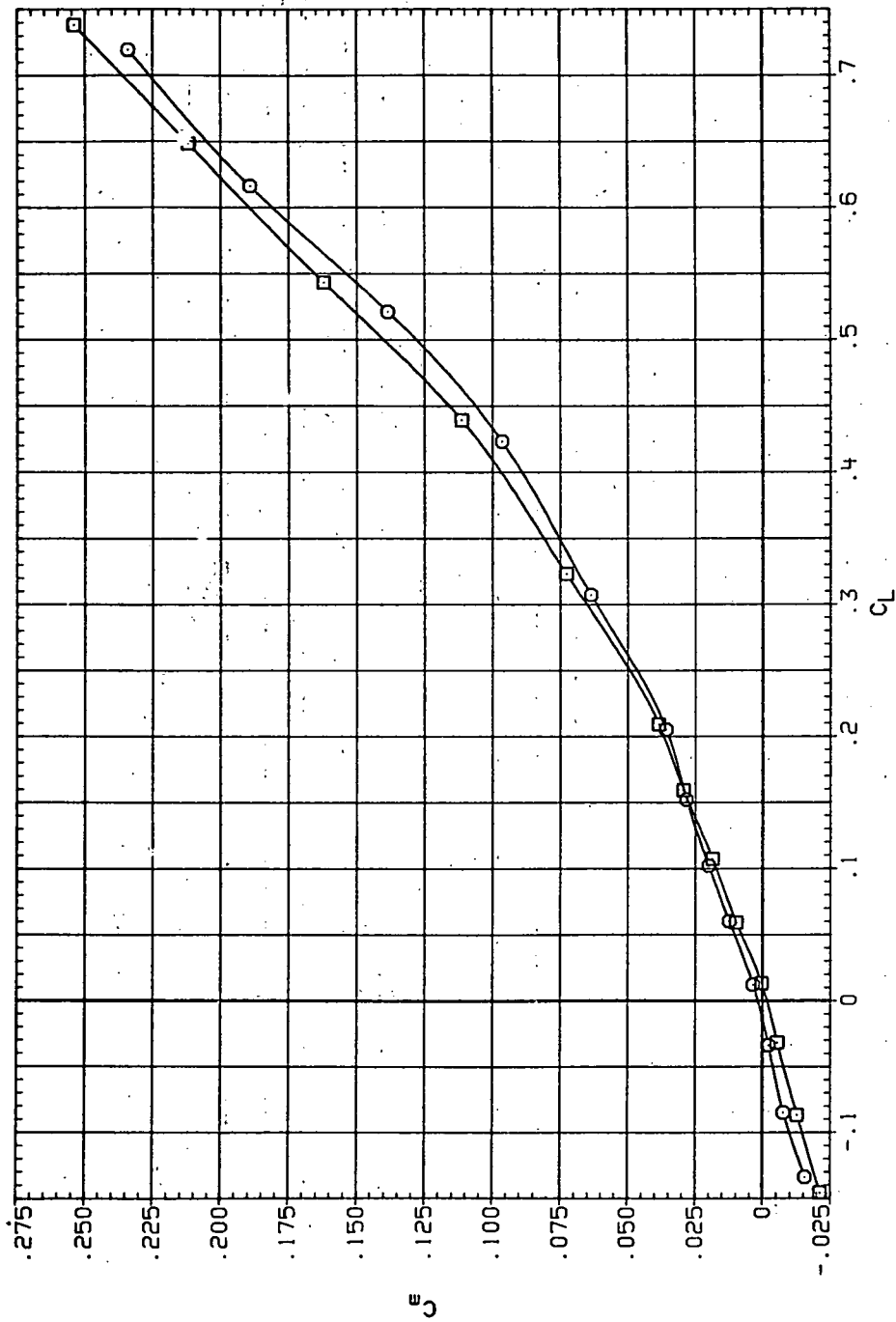


(b) C_D vs C_L .

Figure 69.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR195 ○ 7M55B (STEEL)
 RJR241 □ 7M55B (STEEL)

RN/L Q (NSH)
 6.230 13.400
 8.200 17.800

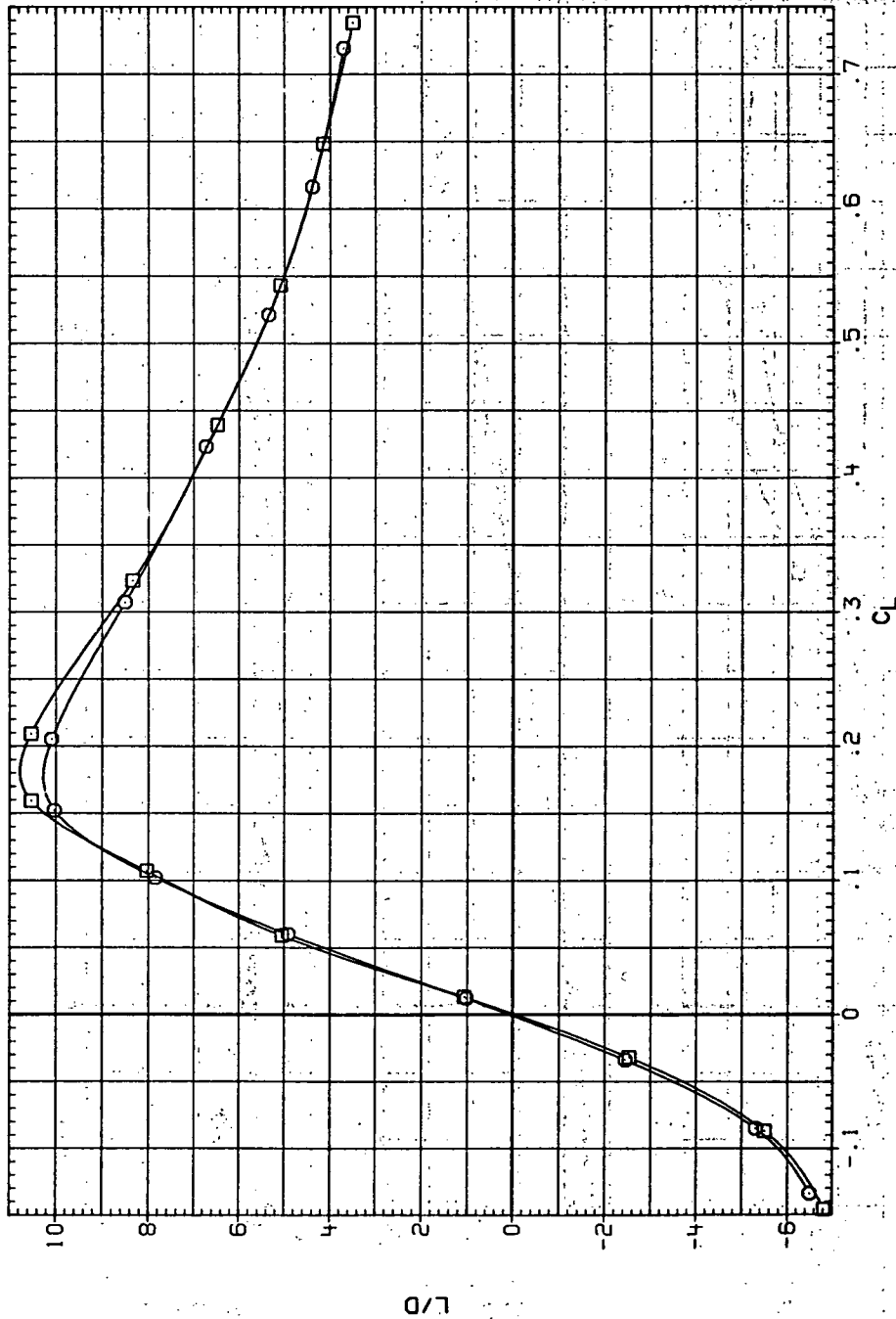


(c) C_m vs C_L .

Figure 69. — Continued.

JATA SET SYMBOL CONFIGURATION
 RJR195 ○ 74558 (STEEL)
 RJR241 □ 74558 (STEEL)

RN/L Q(NSM)
 6.230 13.400
 8.200 17.800

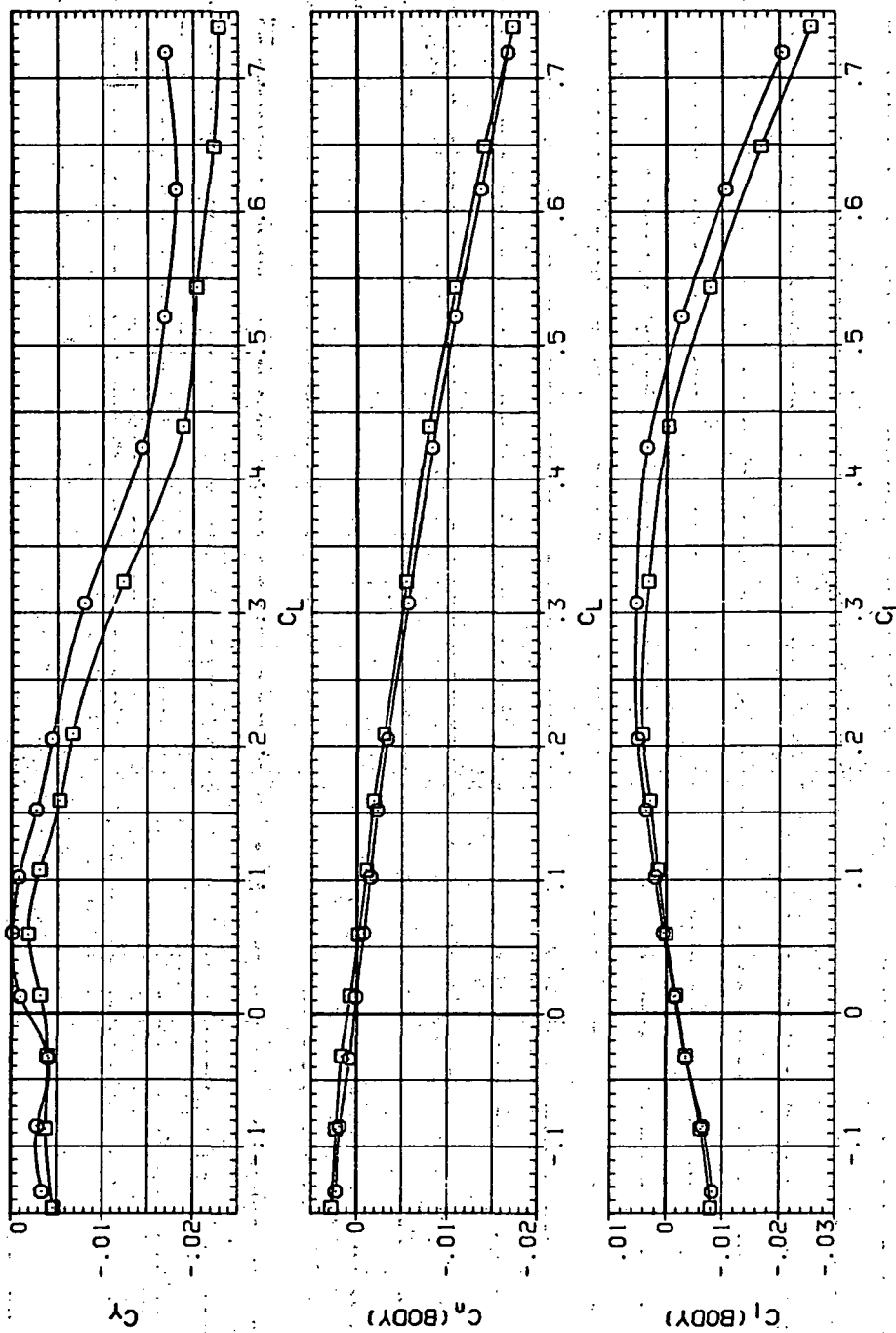


(d) L/D vs C_L

Figure 69.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP195 74558 (STEEL)
 RUP241 74558 (STEEL)

RN/L Q(NSH)
 6.230 13.400
 8.200 17.900

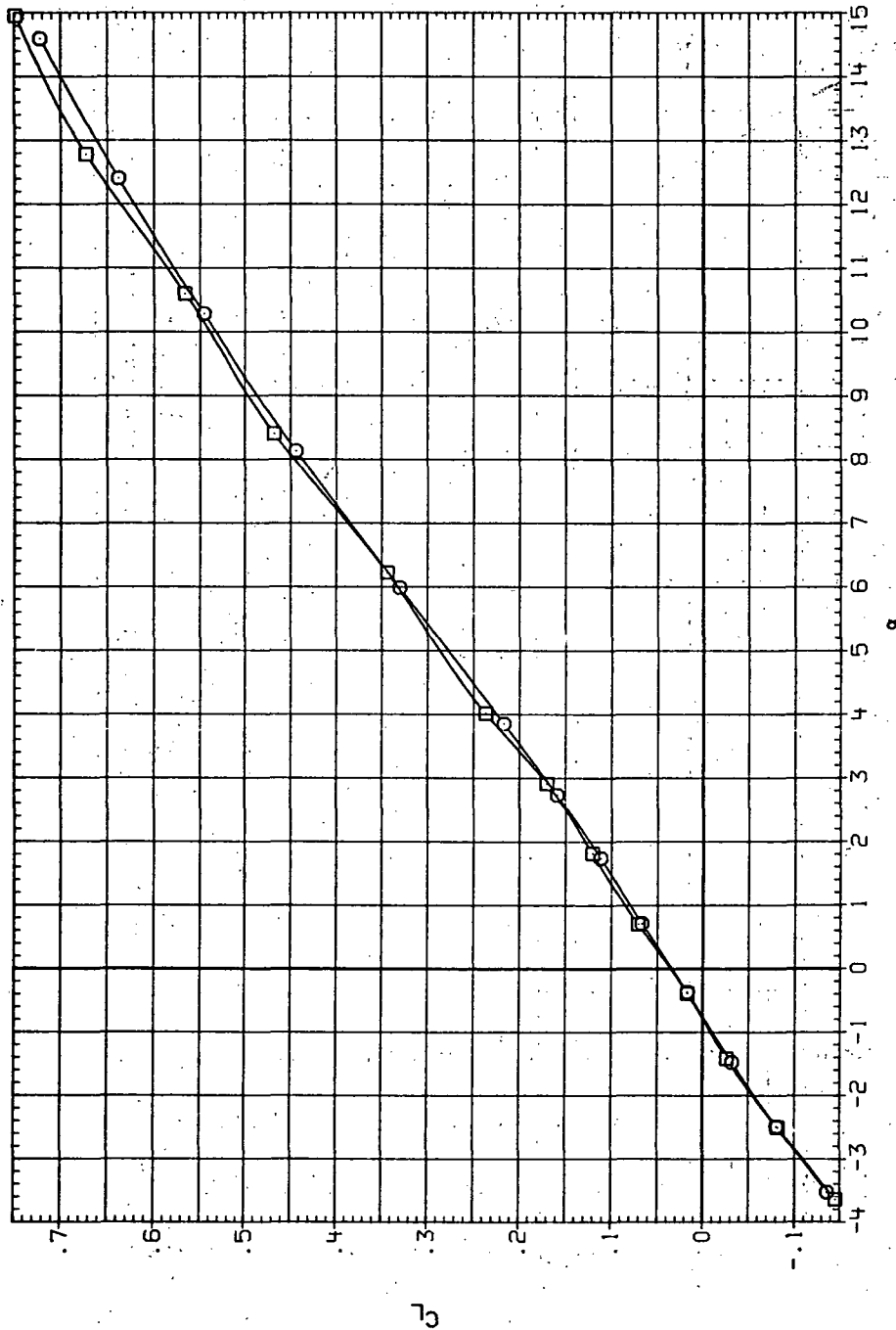


(e) C_Y , C_n and C_l vs C_L .

Figure 69.—Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR196 $\circ$ 7A558 (STEEL)
 RJR242 $\square$ 7A558 (STEEL)

RN/L Q (NSH)
 6.230 14.500
 8.200 19.200

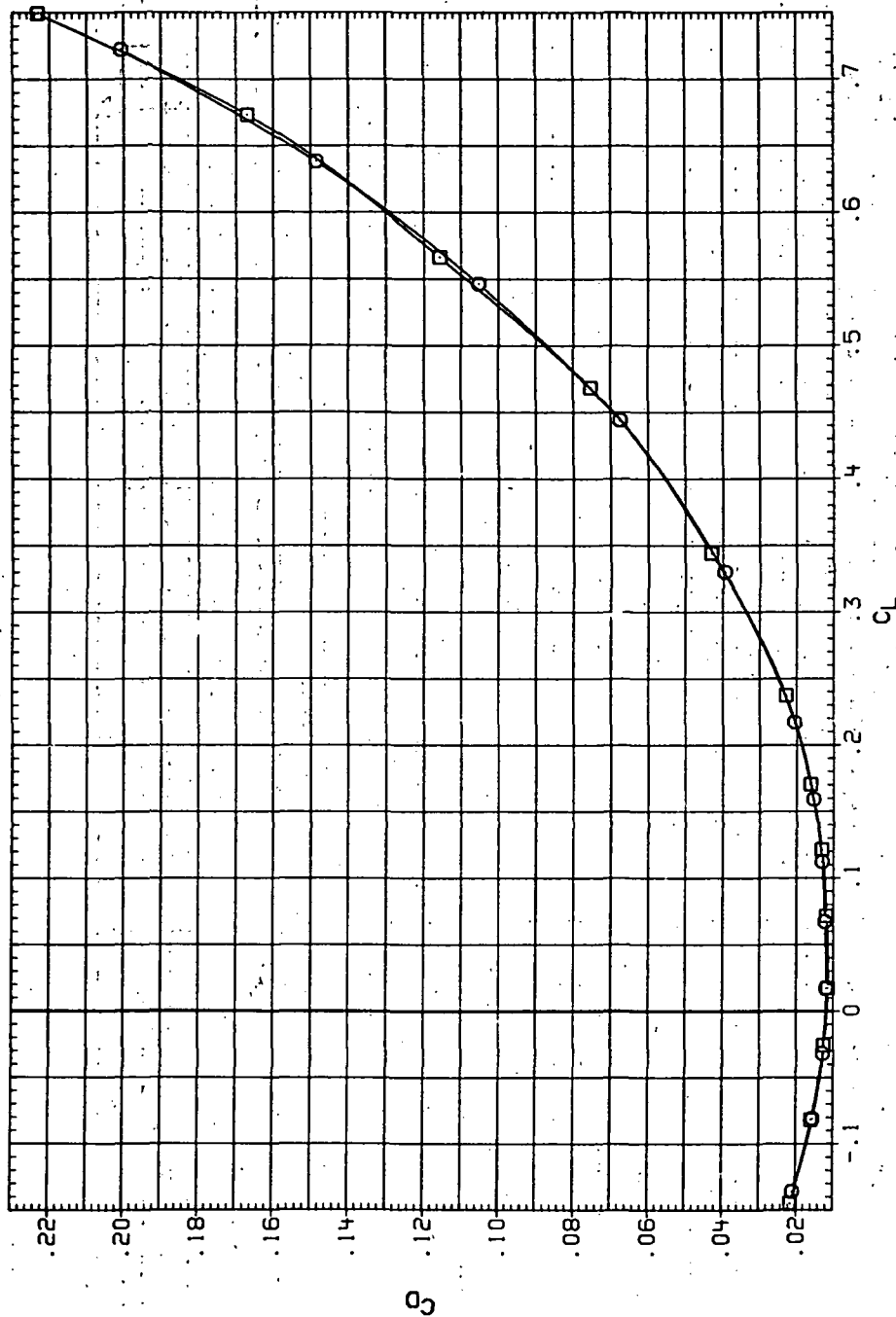


(a) C_L vs α .

Figure 70.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal-oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.9$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR196 7M558 (STEEL)
 RJR242 7M558 (STEEL)

RV/L Q (NSM)
 6.230 14.500
 8.200 19.200

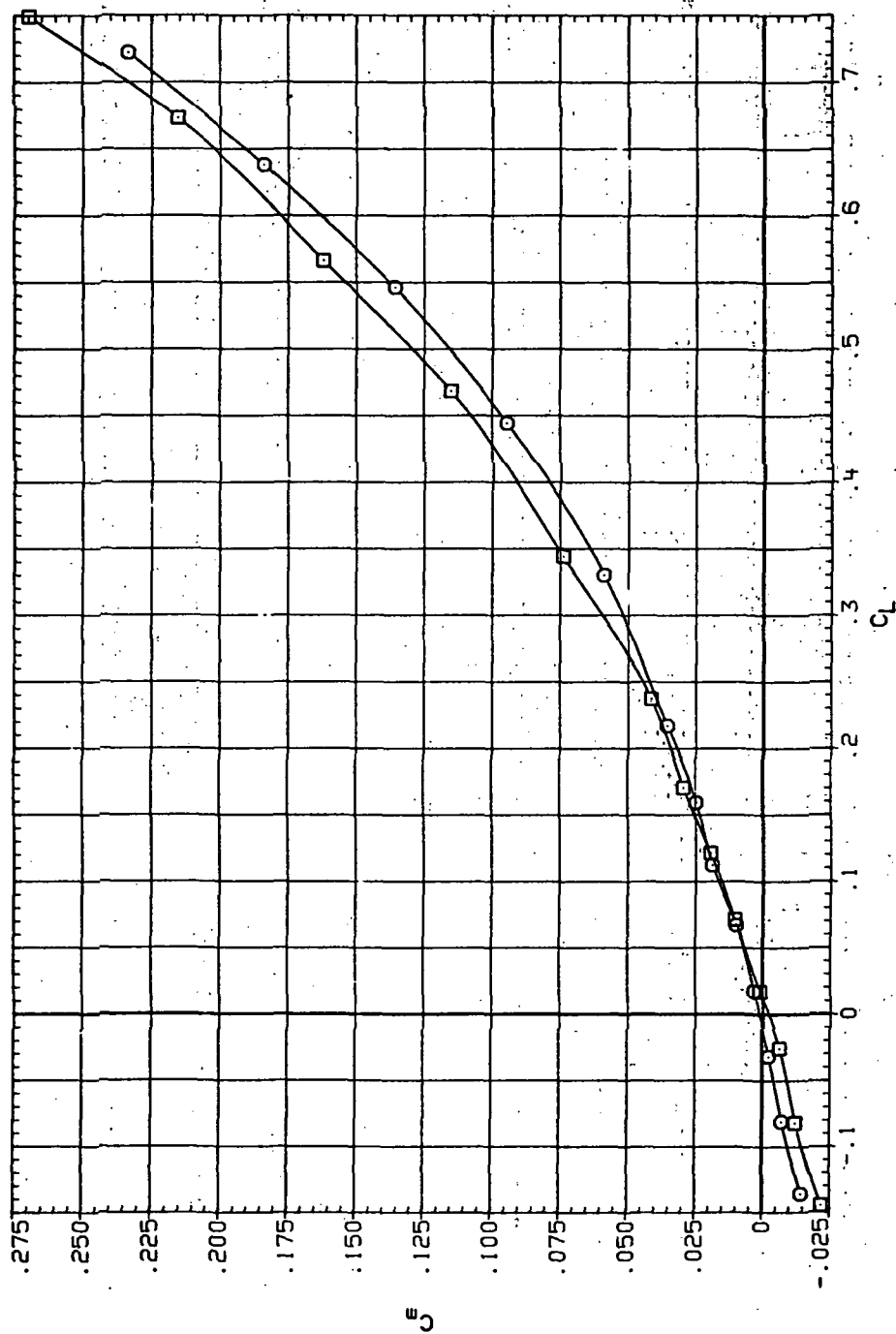


(b) C_D vs C_L .

Figure 70.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP195 ○ 74558 (STEEL)
 RUP242 □ 74558 (STEEL)

RN/L Q (INSH)
 6.230 14.500
 8.200 19.200

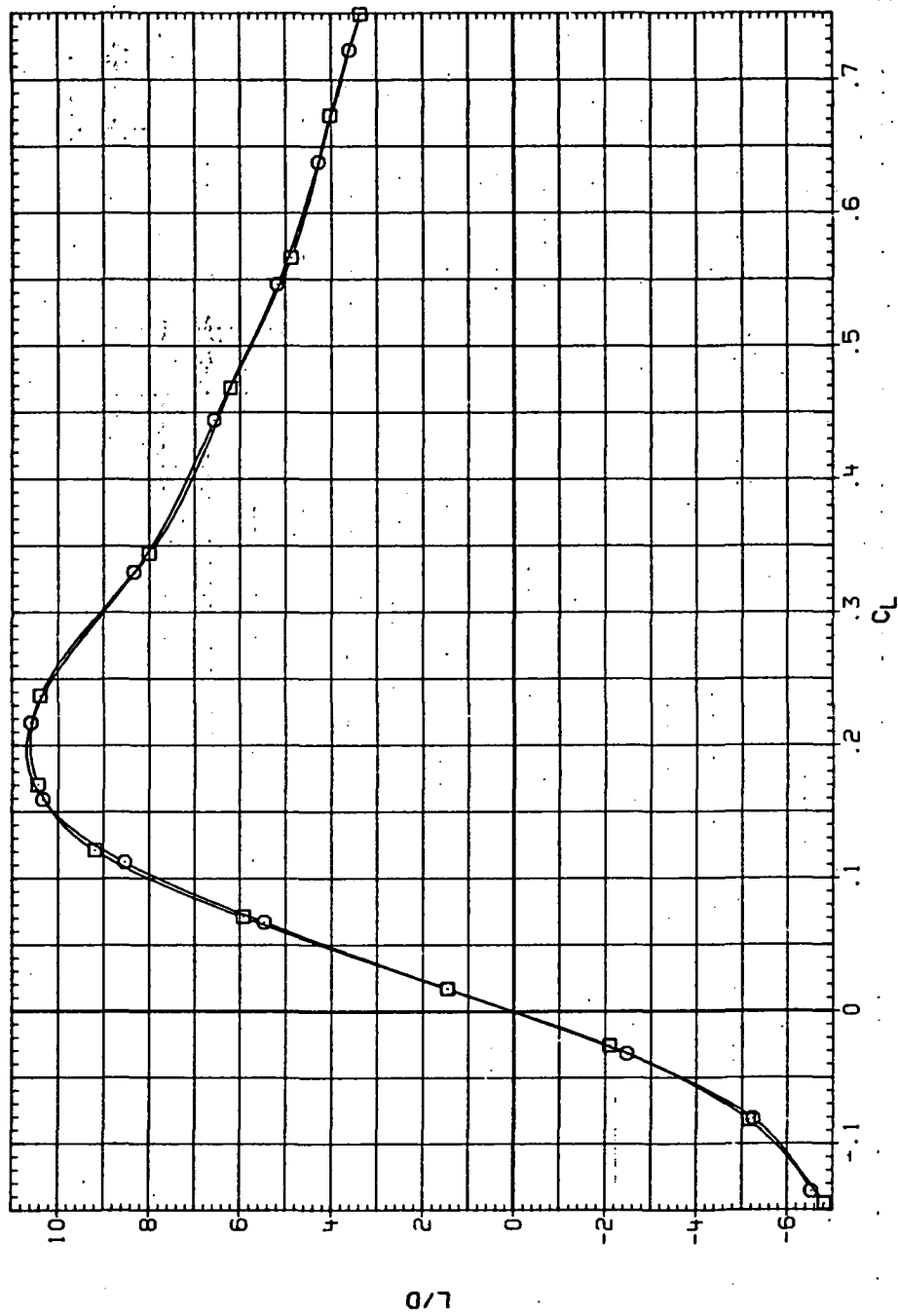


(c) C_m vs C_L

Figure 70.— Continued

DATA SET SYMBOL CONFIGURATION
 RJR195 74558 (STEEL)
 RJR242 74558 (STEEL)

RN/L 0 (NSM)
 6.230 14.500
 8.200 19.200

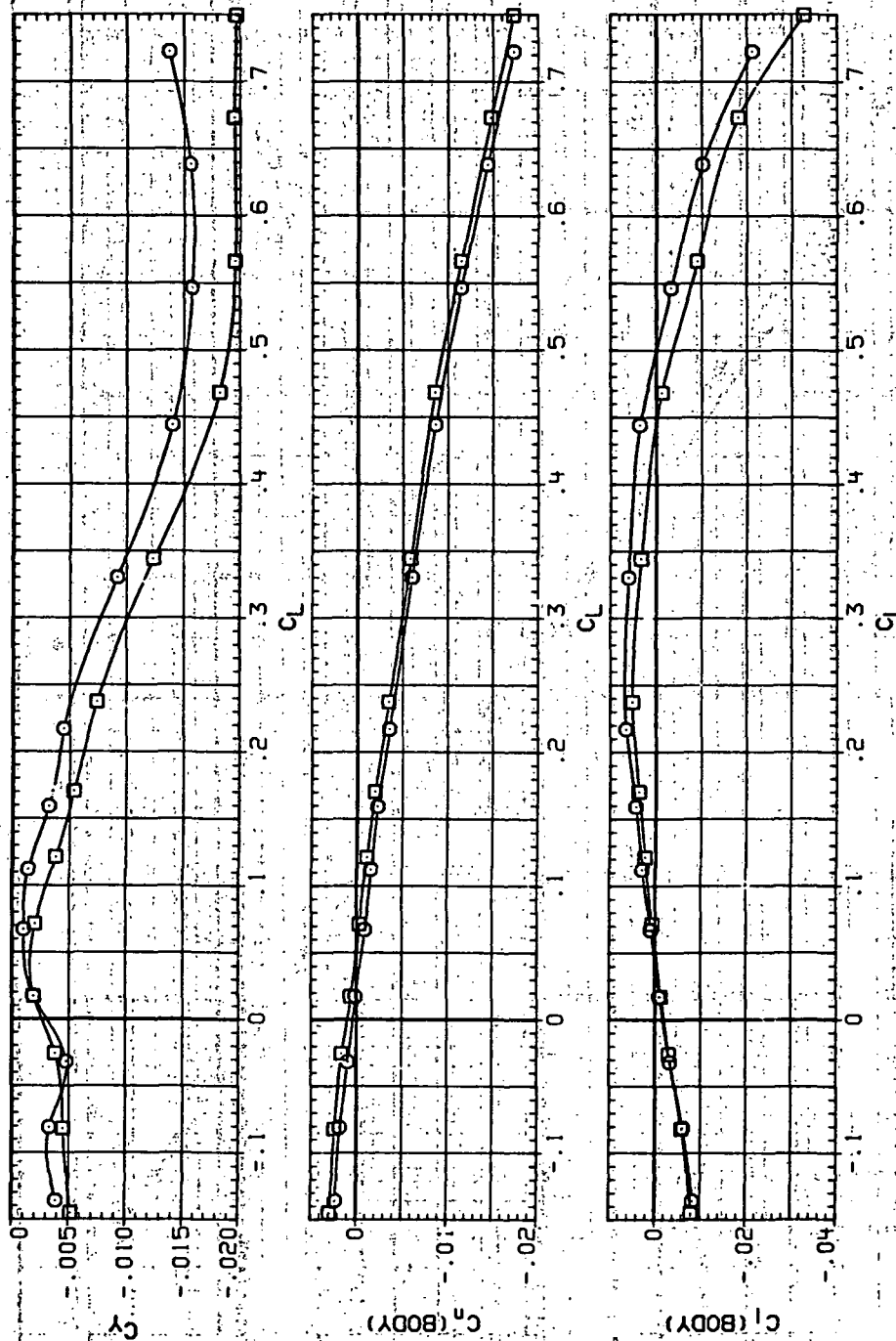


(d) L/D vs C_L .

Figure 70.— Continued.

DATA SET SYMBOL: CONFIGURATION
 R4196 7455B (STEEL)
 R4242 7455B (STEEL)

RV/L (IN/IN)
 6.250 14:500
 8.200 19:200

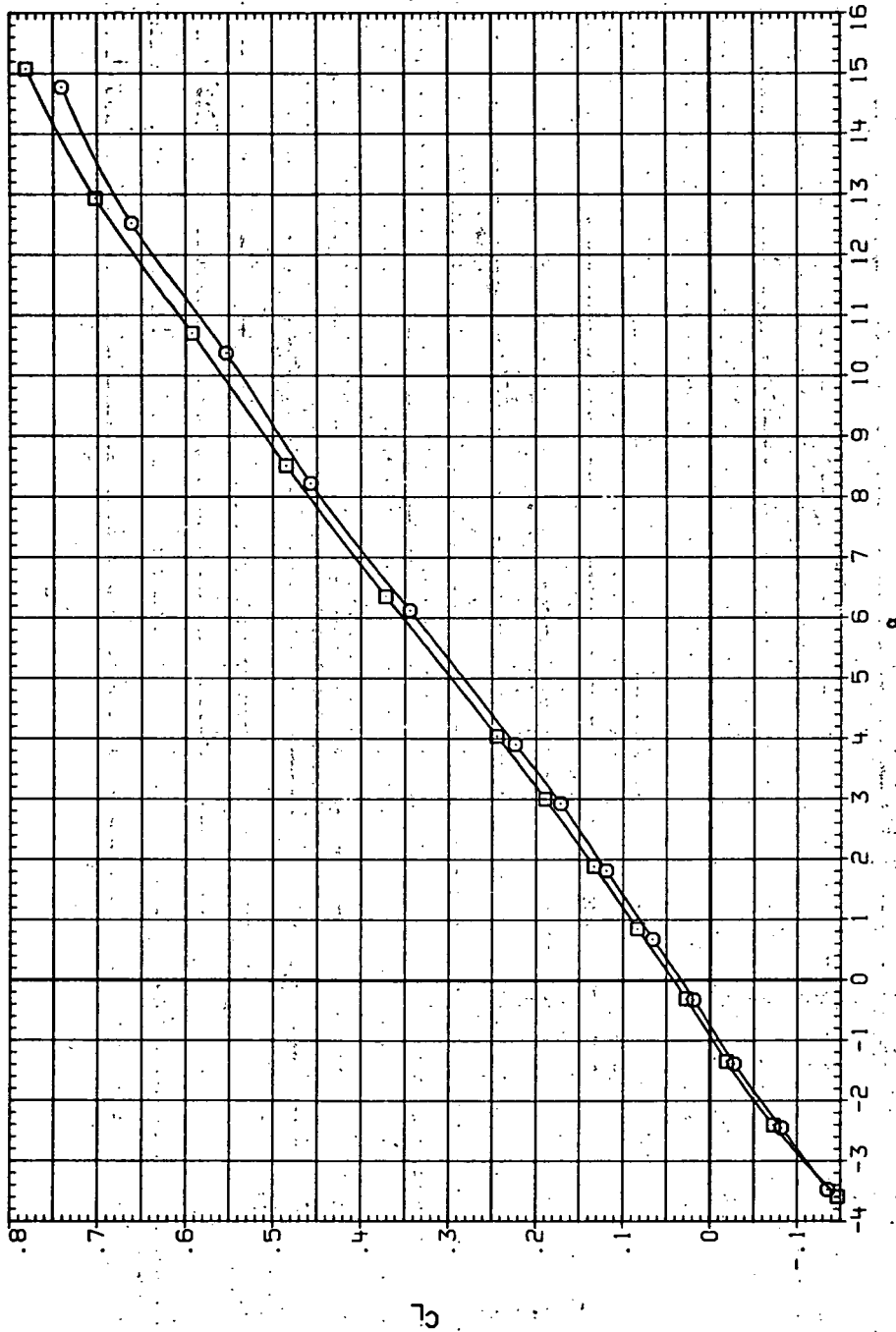


(e) C_Y , C_n and C_l vs C_L .

Figure 70. — Concluded.

DATA SET SYMBOL CONFIGURATION
 R0107 74558 (STEEL)
 R0243 74558 (STEEL)

RN/L Q(NSM)
 6.230 15.000
 6.200 19.500

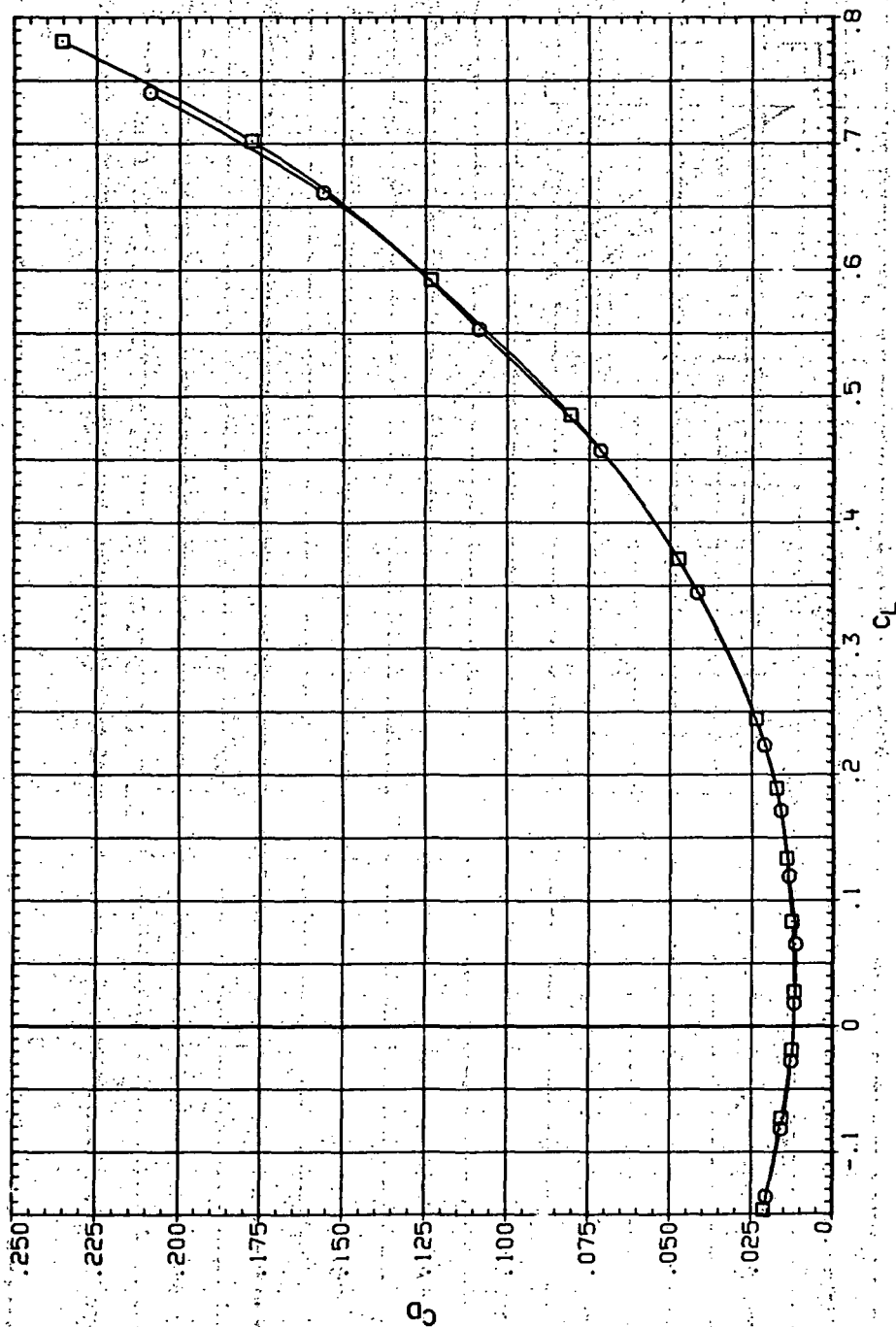


(a) C_L vs α .

Figure 7.1.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R1917 74558 (STEEL)
 R1923 74558 (STEEL)

RN/L 0 (NSM)
 6.230 15.000
 8.200 19.900



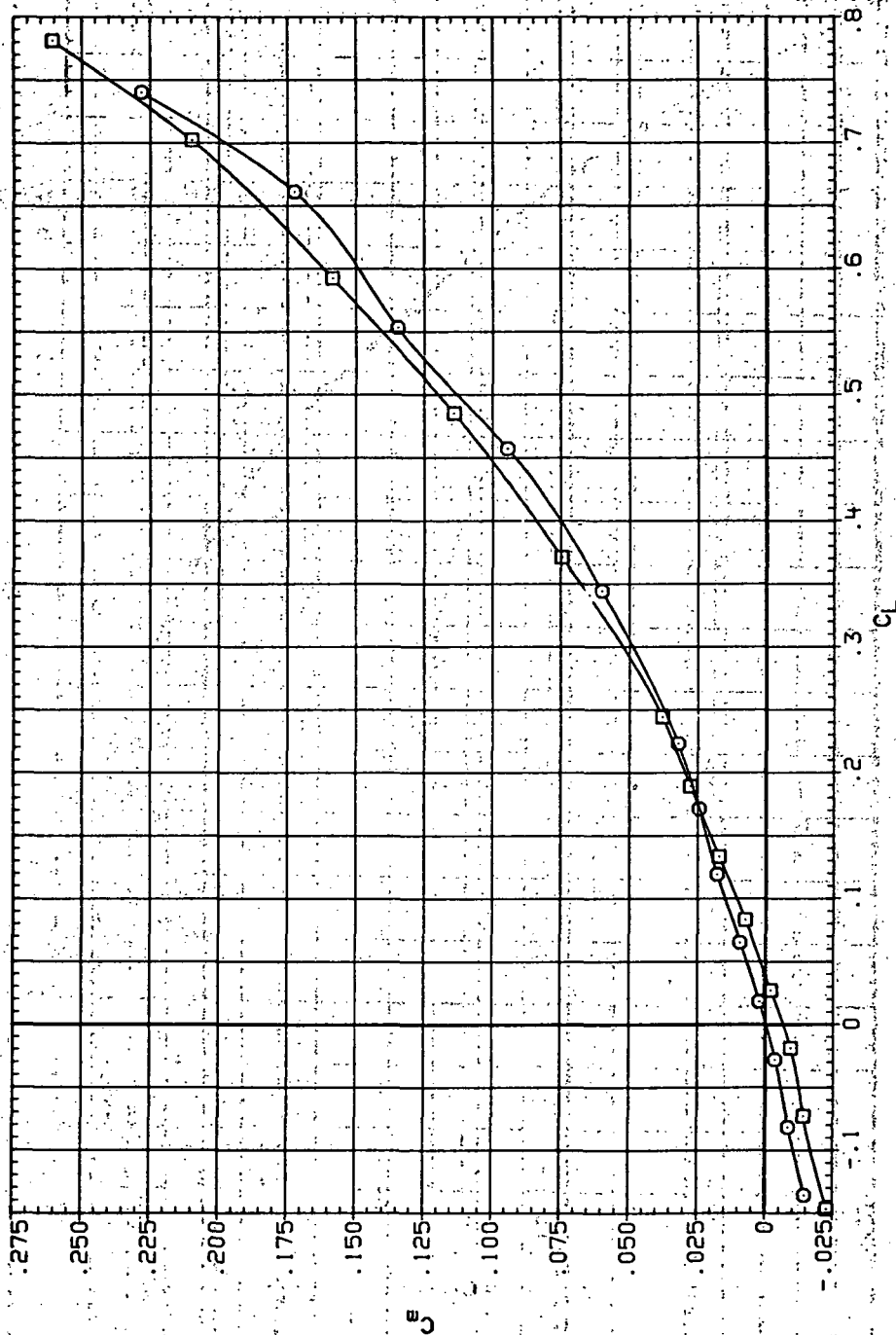
(b) C_D vs C_L .

Figure 71. - Continued.

Figure 71 - Continued

DATA SET SYMBOL CONFIGURATION
 RUI97 O 7455B (STEEL)
 RUI243 □ 7455B (STEEL)

RV/L Q(NSM)
 6.350 15.000
 8.500 19.900

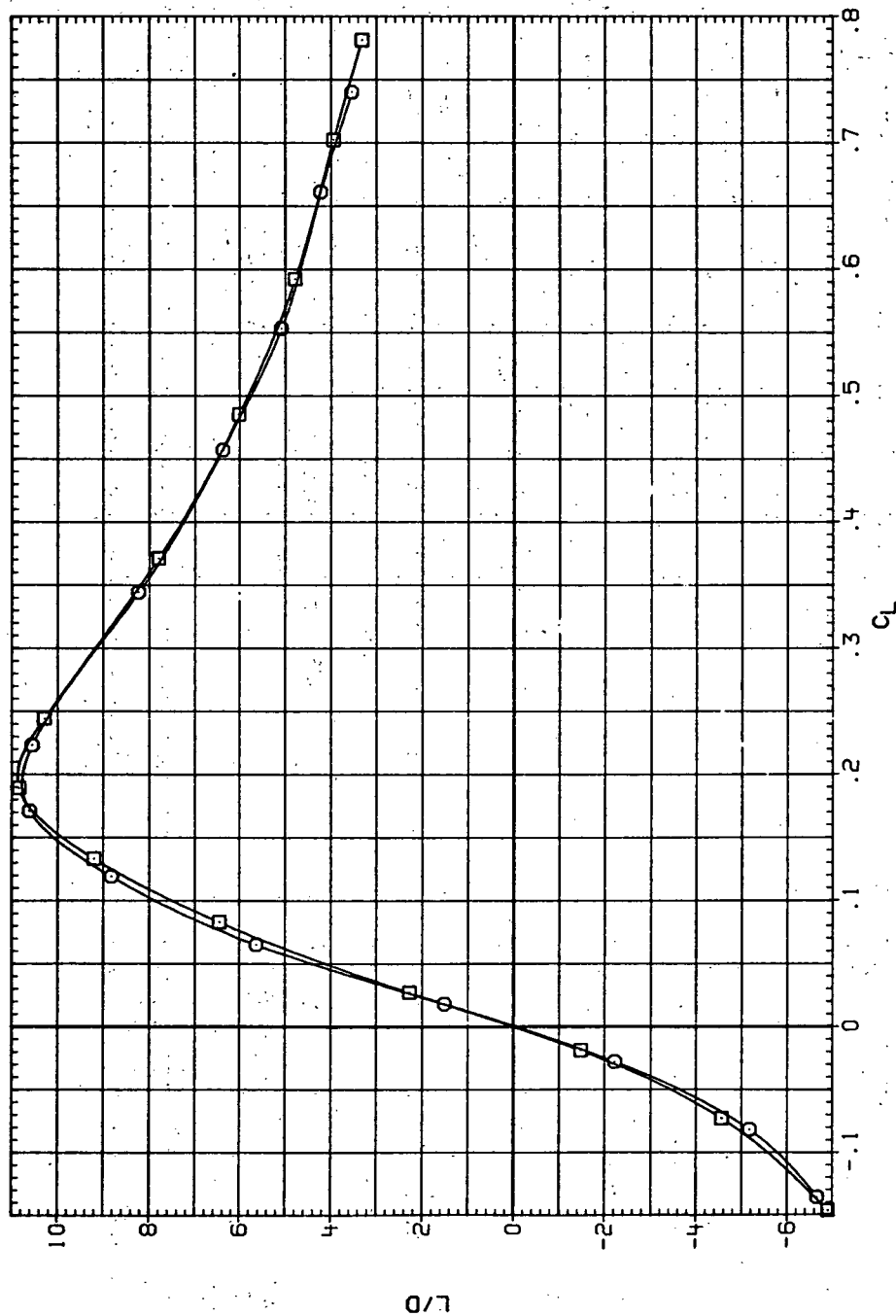


(c) C_m vs C_L

Figure 71 - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR197 ○ 74558 (STEEL)
 RJR243 □ 74558 (STEEL)

RN/L Q (NEM)
 6.230 15.000
 8.200 19.900

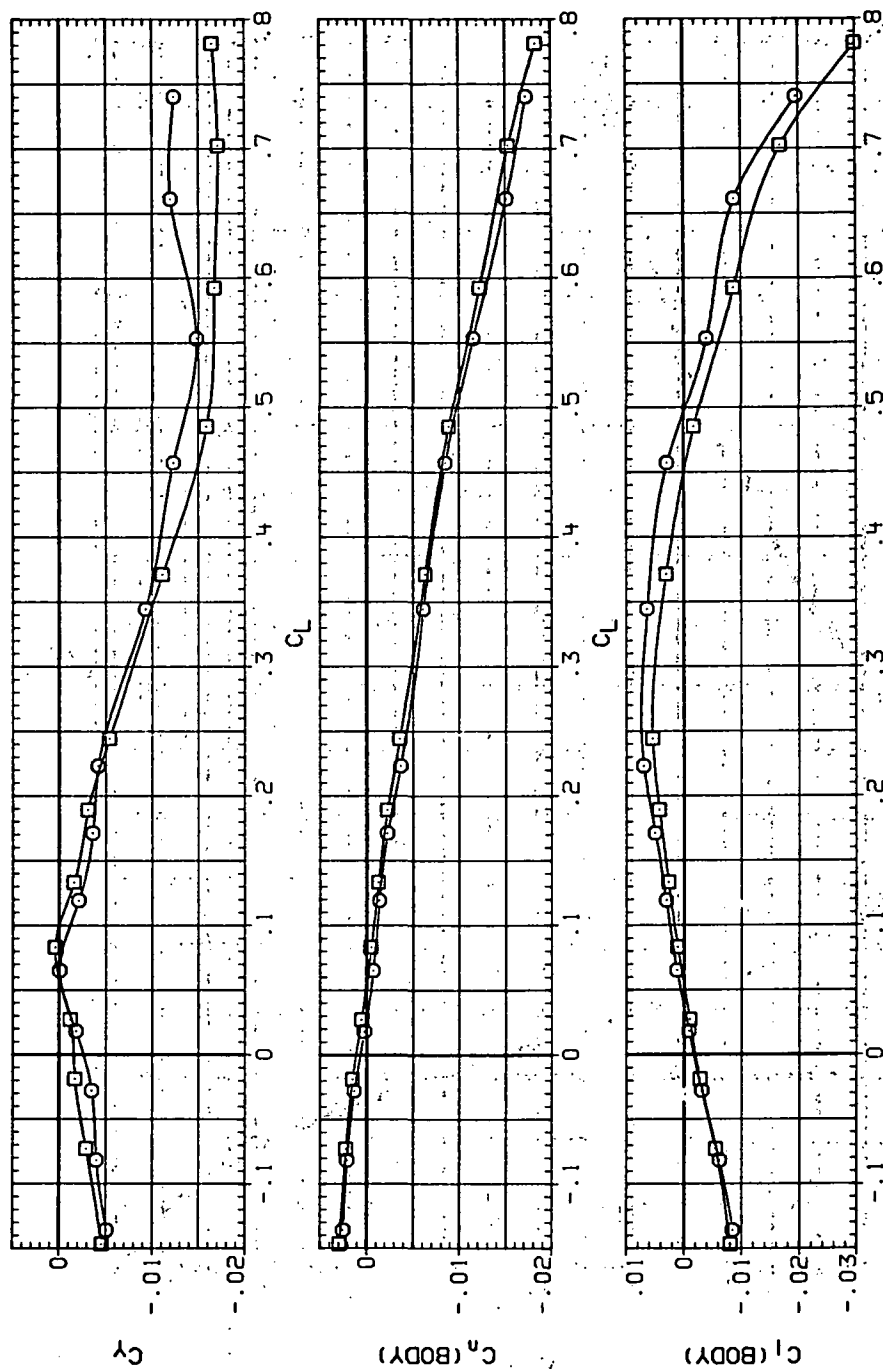


(d) L/D vs C_L .

Figure 71.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR197 $\square$ 7455B (STEEL)
 RJR243 $\square$ 7455B (STEEL)

RN/L Q(NSM)
 6.230 15.000
 8.200 19.900

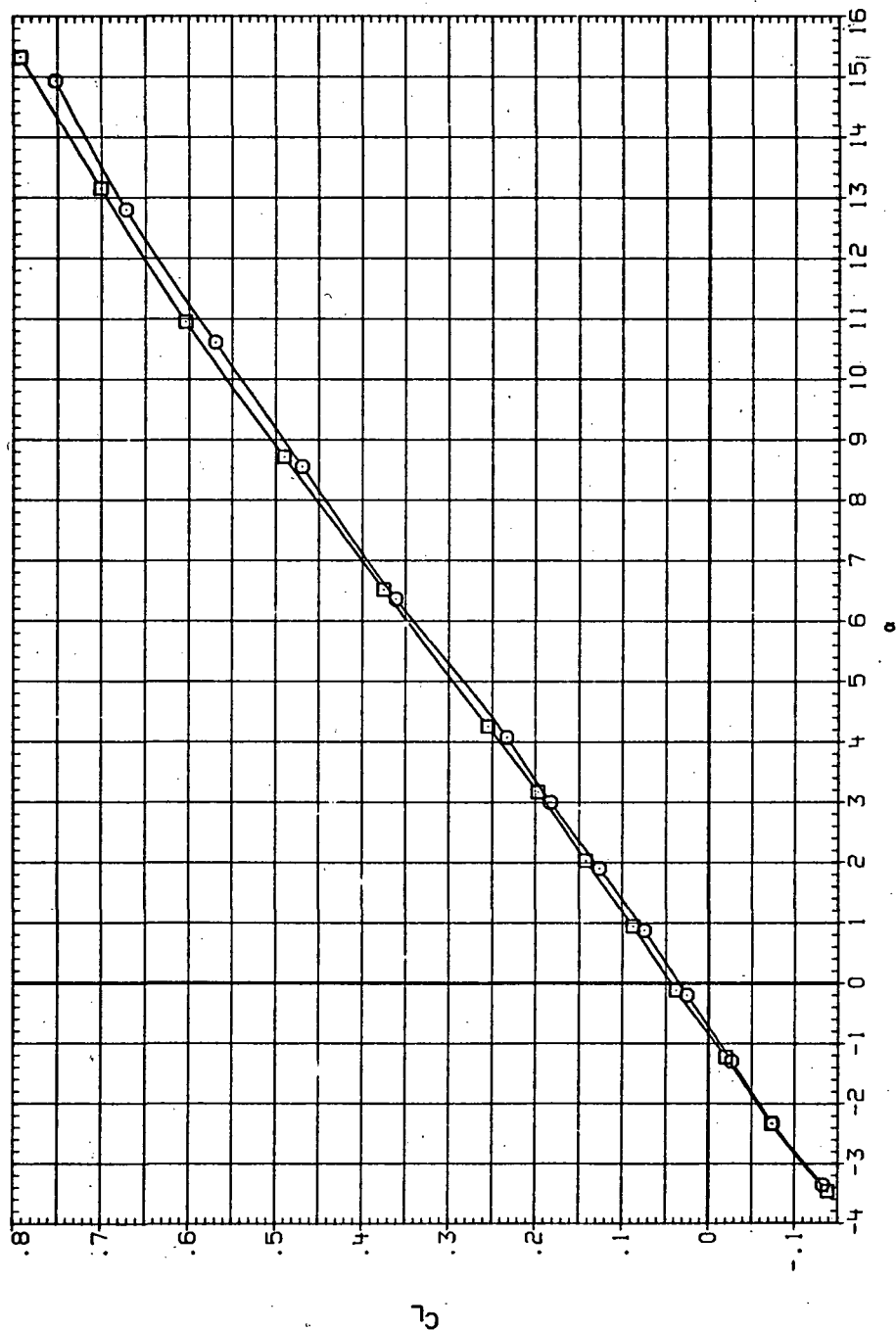


(e) C_y , C_n and C_l vs C_L .

Figure 71. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RUI198 74558 (STEEL)
 RUI244 74558 (STEEL)

RN/L Q (NSM)
 6.230 16.400
 8.200 21.200

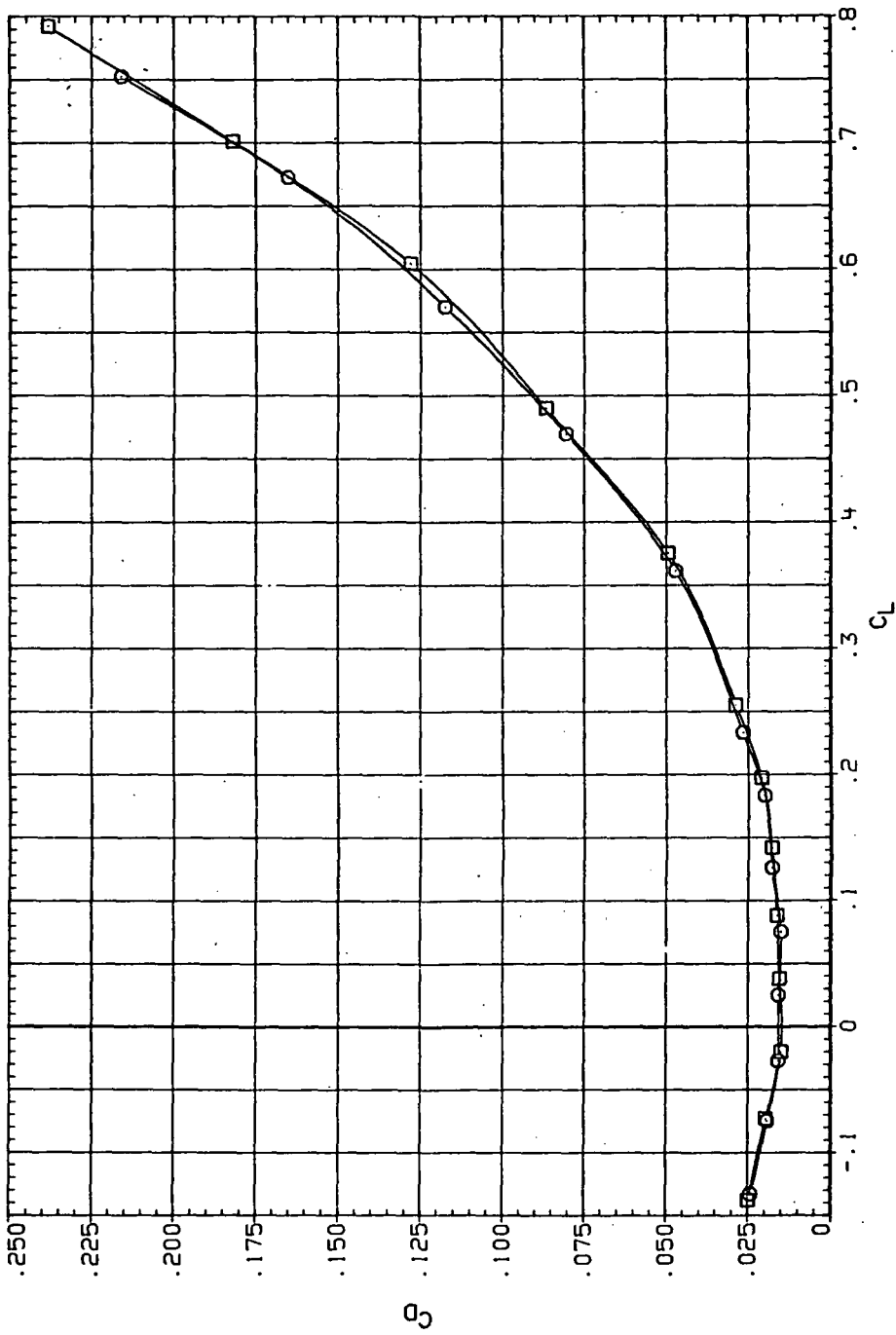


(a) C_L vs α .

Figure 72.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal-oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.1$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR198 $\square$ 7455B (STEEL)
 RJR244 $\circ$ 7455B (STEEL)

RN/L Q (INSH)
 6.230 1C 400
 6.200 21.200

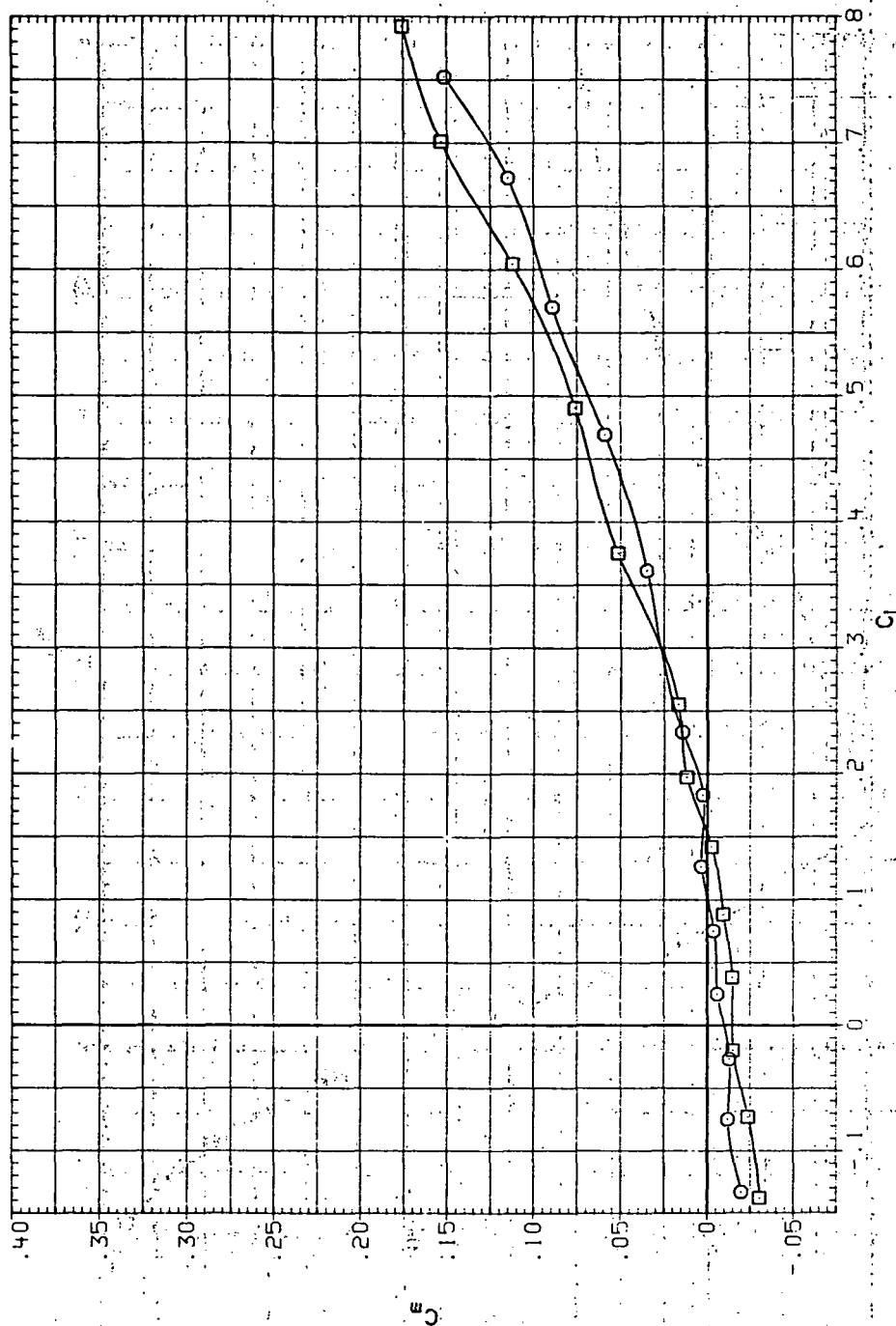


(b) C_D vs C_L .

Figure 72.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR198 ○ 74558 (STEEL)
 RJR244 □ 74558 (STEEL)

RN/L 0 (NSM)
 6.230 16.400
 8.200 21.200

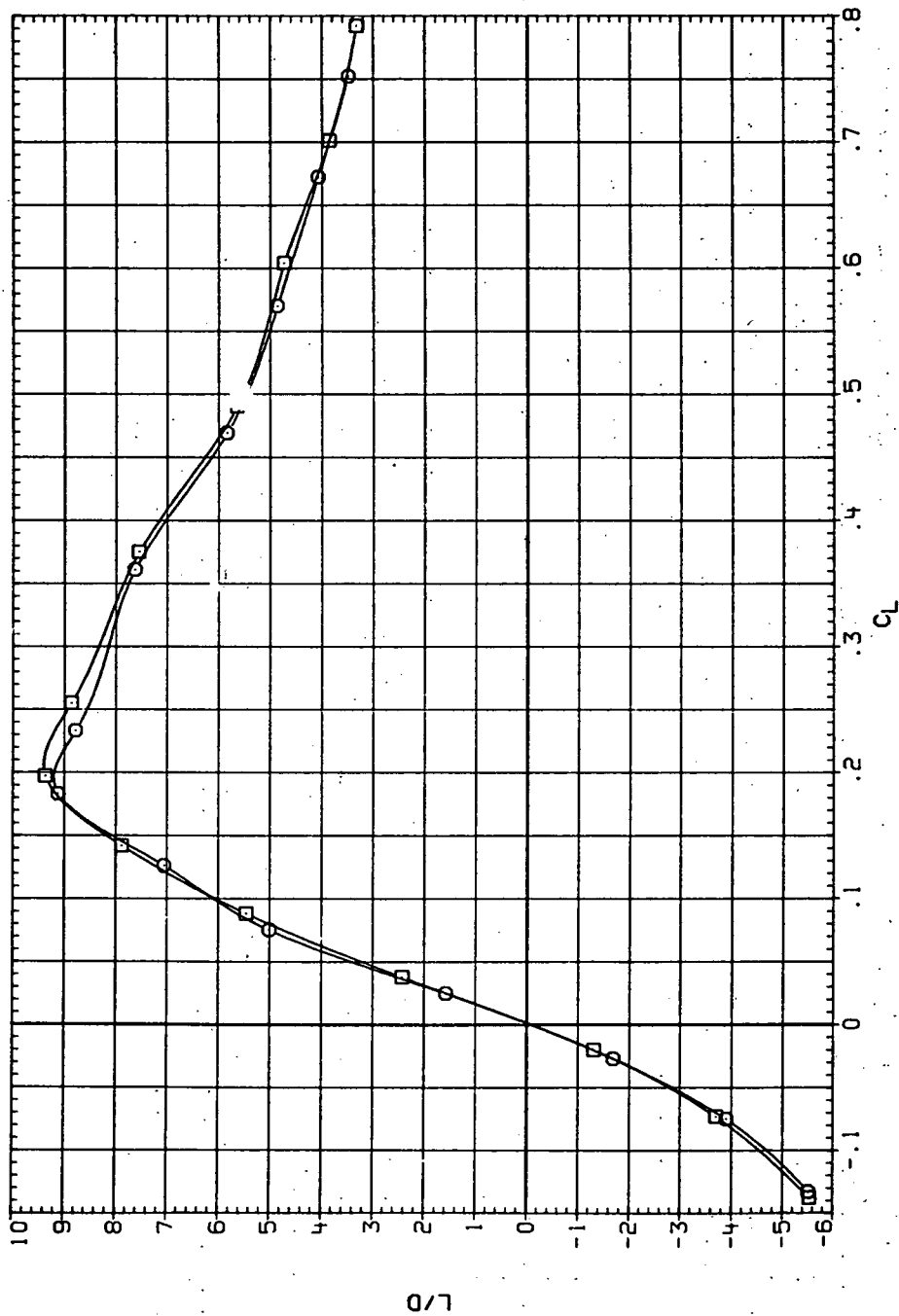


(c) C_m vs C_L .

Figure 72: - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR198 74558 (STEEL)
 RJR244 74558 (STEEL)

RV/L Q (NSM)
 6.230 16.400
 8.200 21.200

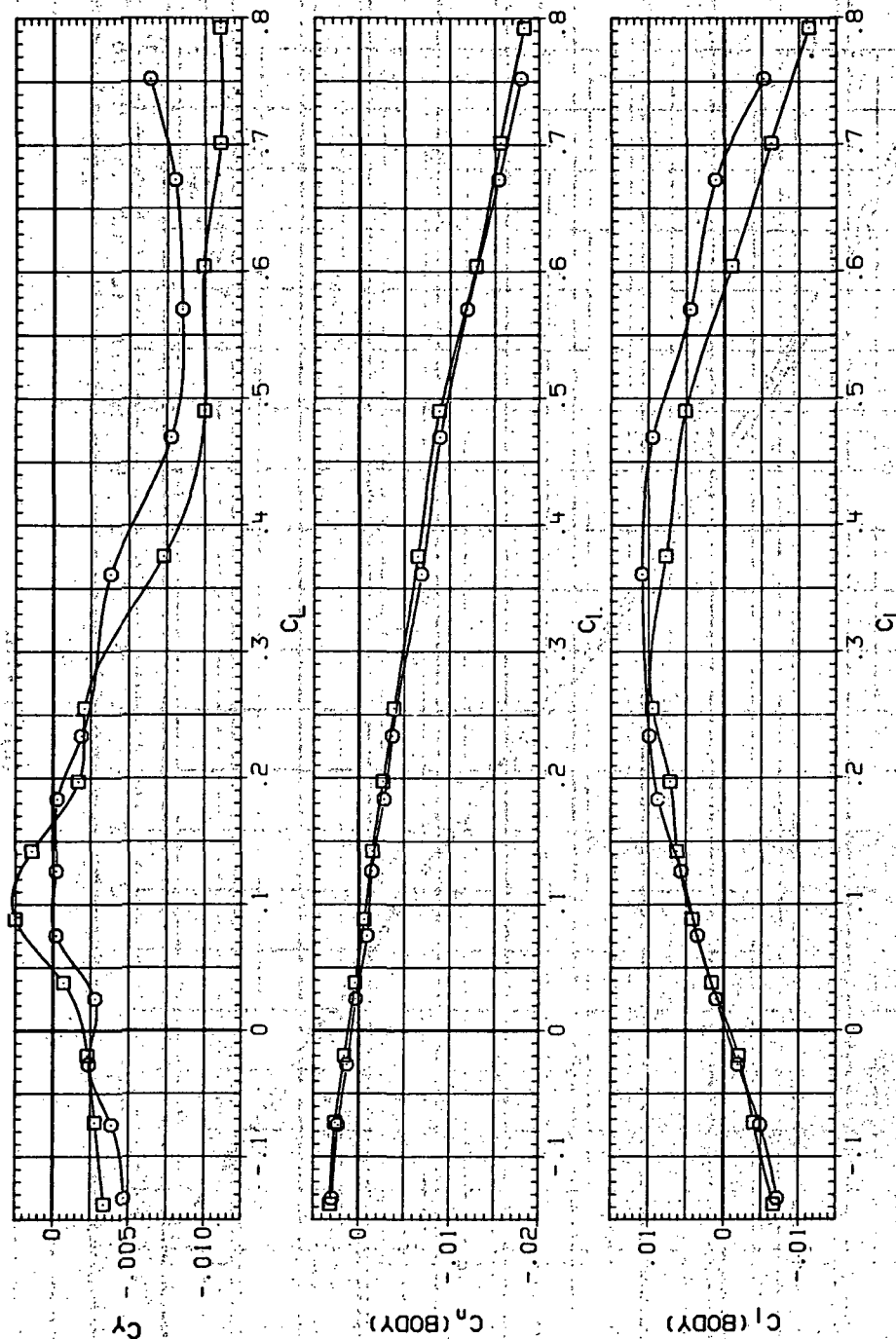


(d) L/D vs C_L .

Figure 72.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR198 ○ 74558 (STEEL)
 RJR244 □ 74558 (STEEL)

RVL Q(NSH)
 6.230 16.400
 8.200 21.200



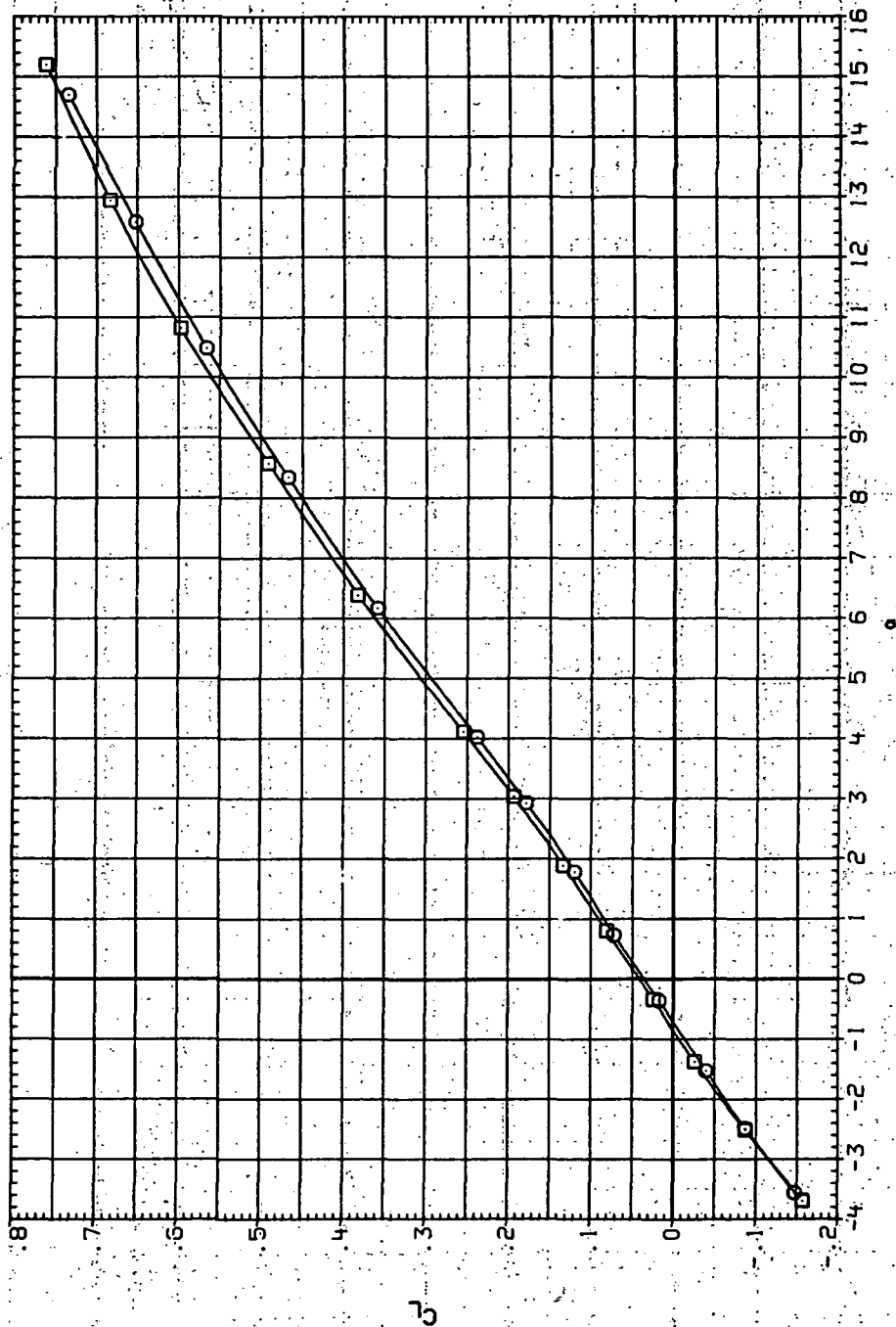
(e) C_y , C_n and C_l vs C_L .

Figure 72. Concluded.

6.5/8 11/10/6
 195003

DATA SET SYMBOL CONFIGURATION
 RUP199 ○ 7M55B (STEEL)
 RUP245 □ 7M55B (STEEL)

RM/L Q(NSH)
 6.230 17.000
 8.200 22.800

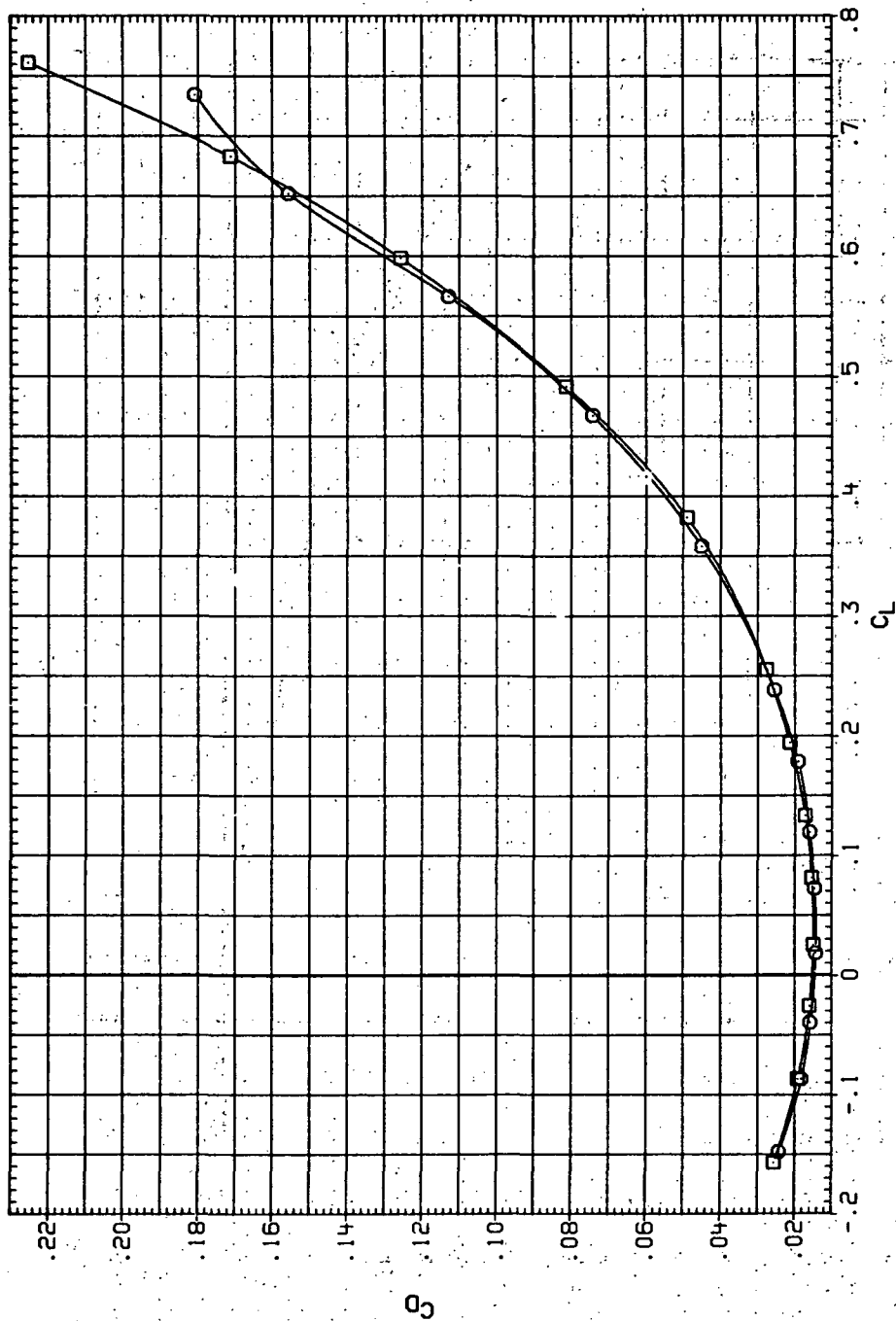


(a) C_L vs α .

Figure 73.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.2$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR199 $\square$ 74558 (STEEL)
 RJR245 $\circ$ 74558 (STEEL)

RV/L Q (NSM)
 6.230 17.000
 8.200 22.800

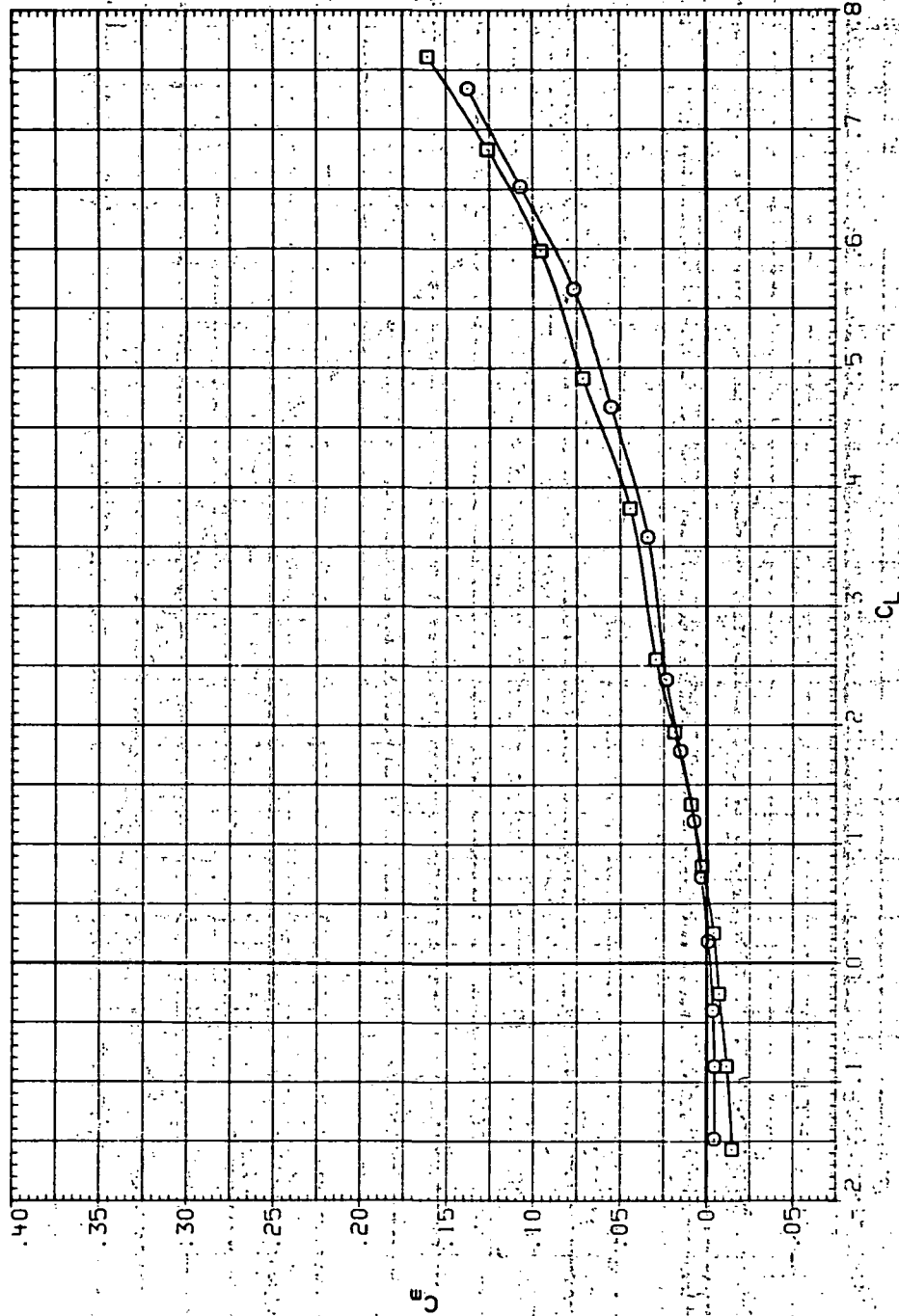


(b) C_D vs C_L .

Figure 73.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR199 ○ 7W558 (STEEL)
 RJR245 □ 7W558 (STEEL)

RN/L Q(NSH)
 6.230 17.000
 8.200 22.800

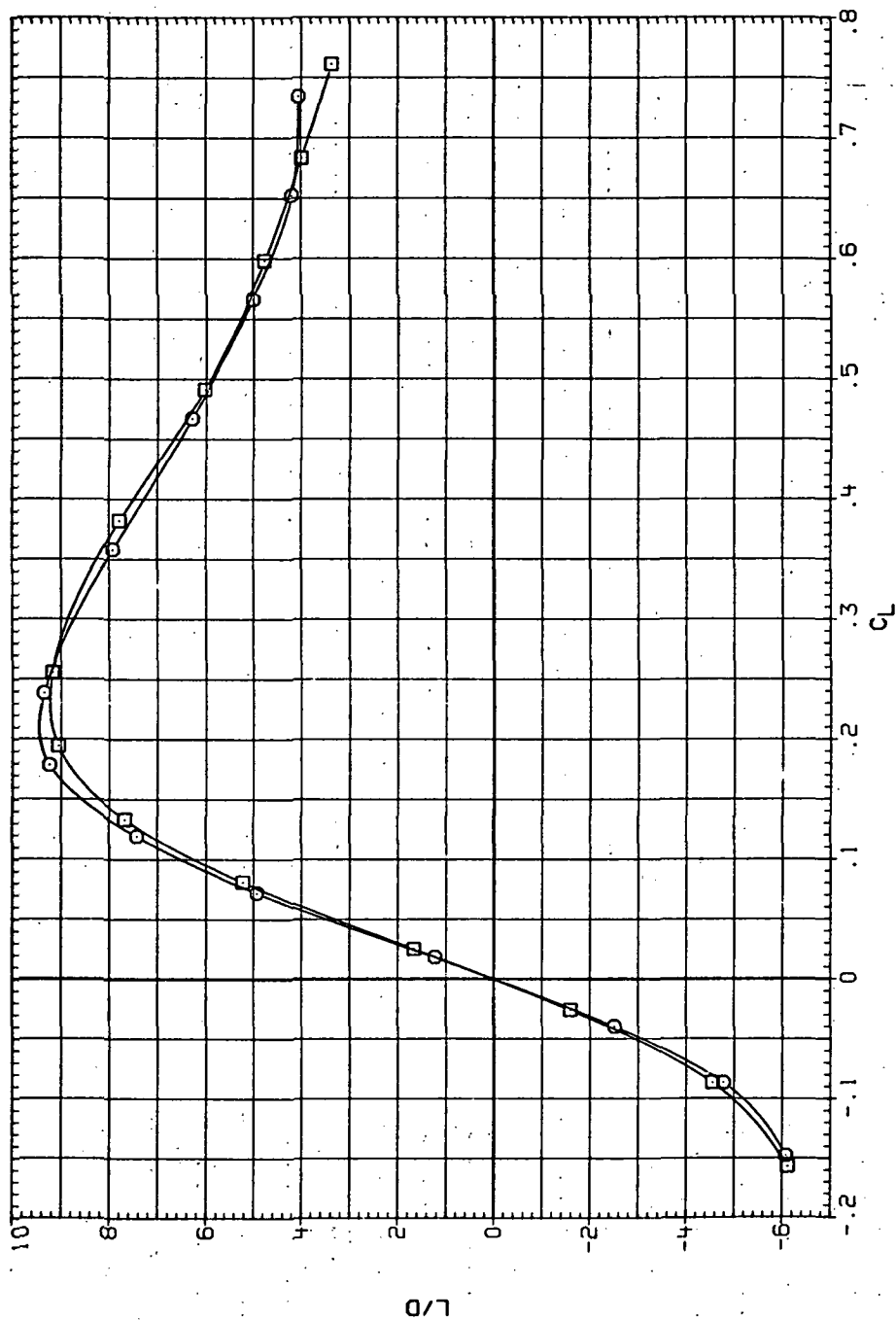


(c) C_m vs C_L .

Figure 73.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR199 ○ 7455B (STEEL)
 RJR245 □ 7455B (STEEL)

RV/L 0 (INSH)
 6.230 17.000
 8.200 22.800

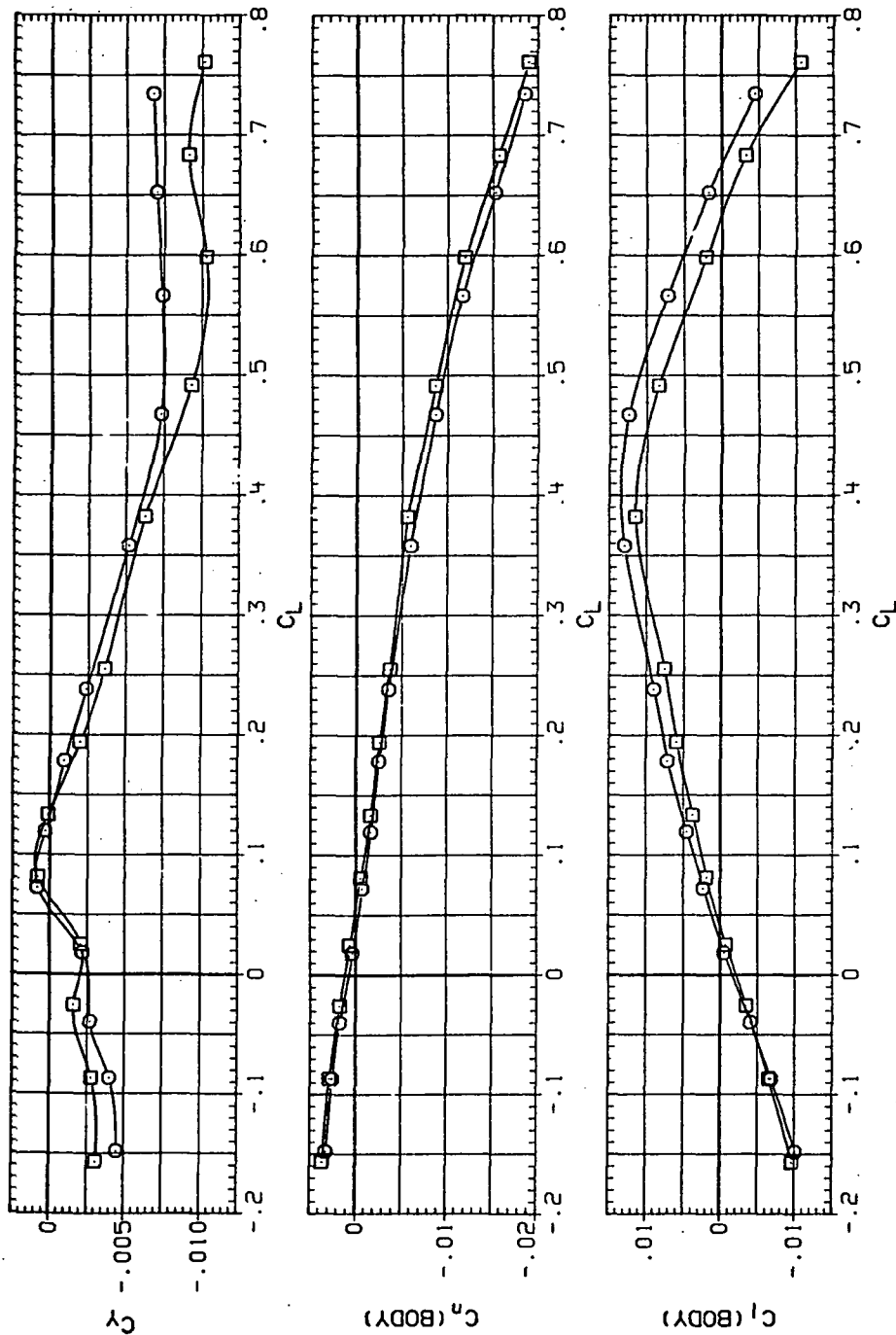


(d) L/D vs C_L .

Figure 73.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR199 ○ 74559 (STEEL)
 RJR245 □ 74558 (STEEL)

RN/L Q (INSH)
 5.230 17.000
 8.200 22.800

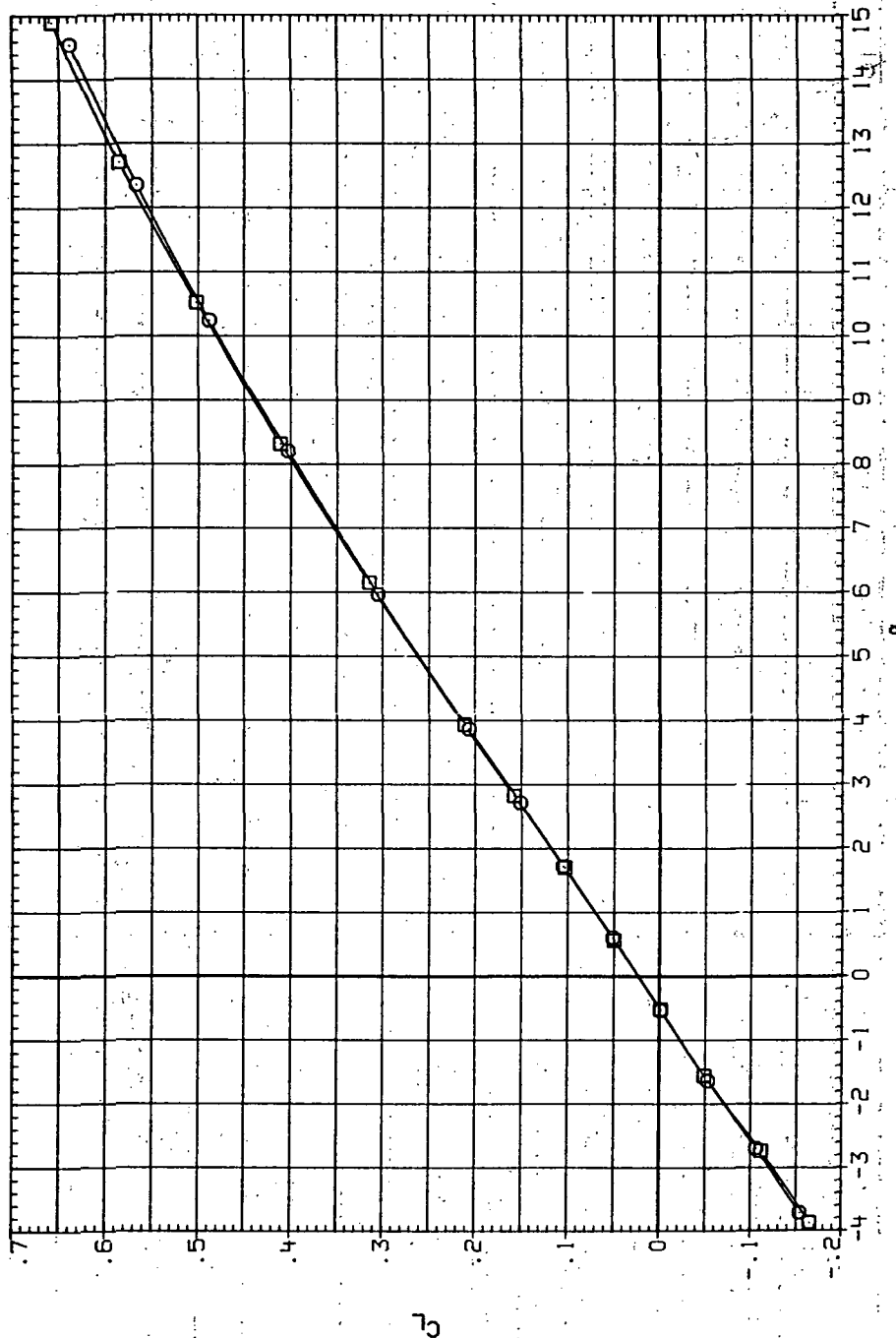


(e) C_Y , C_n and C_l vs C_L .

Figure 73.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR200 7455B (STEEL)
 RJR246 7455B (STEEL)

RM/L Q(NSH)
 6.230 18,600
 8.200 24,400

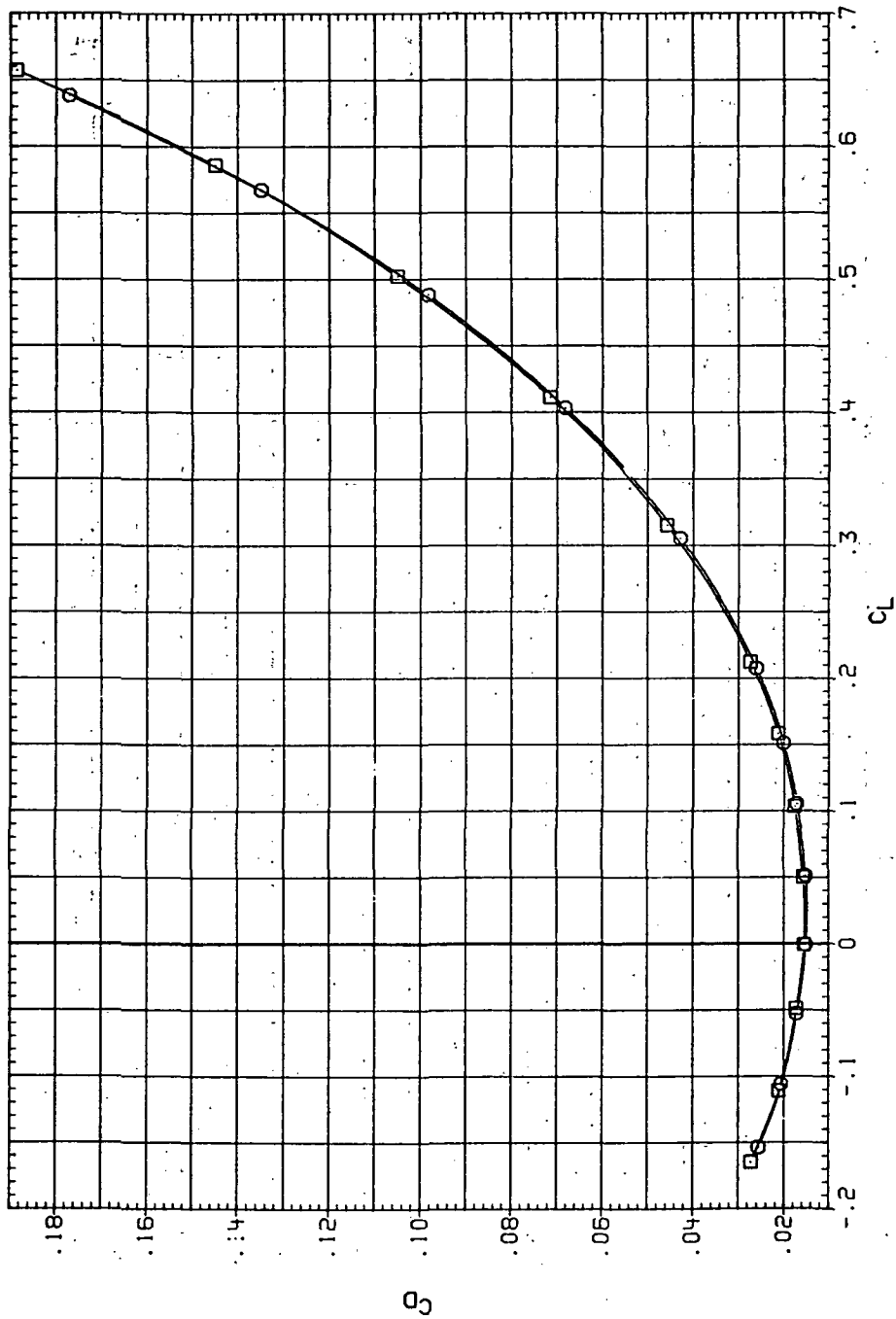


(a) C_L vs α .

Figure 74. — Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 1.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR200 ○ 7455B (STEEL)
 RJR246 □ 7455B (STEEL)

RV/L Q(NSM)
 6.230 18.600
 8.200 24.400

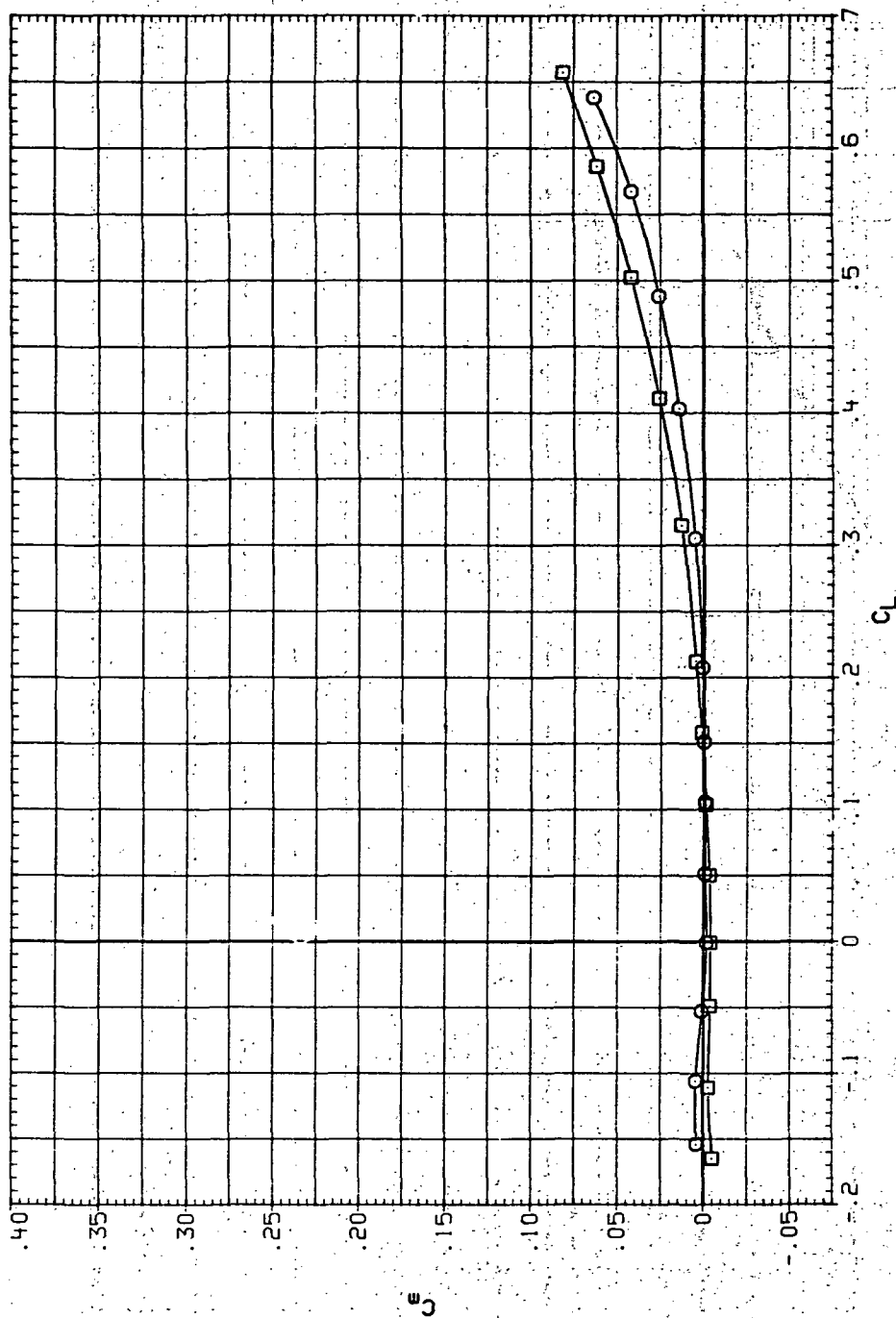


(b) C_D vs C_L .

Figure 74. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR200 ○ 7W55B (STEEL)
 RJR246 □ 7W55B (STEEL)

RV/L Q(NSH)
 6.230 18.600
 8.200 24.400

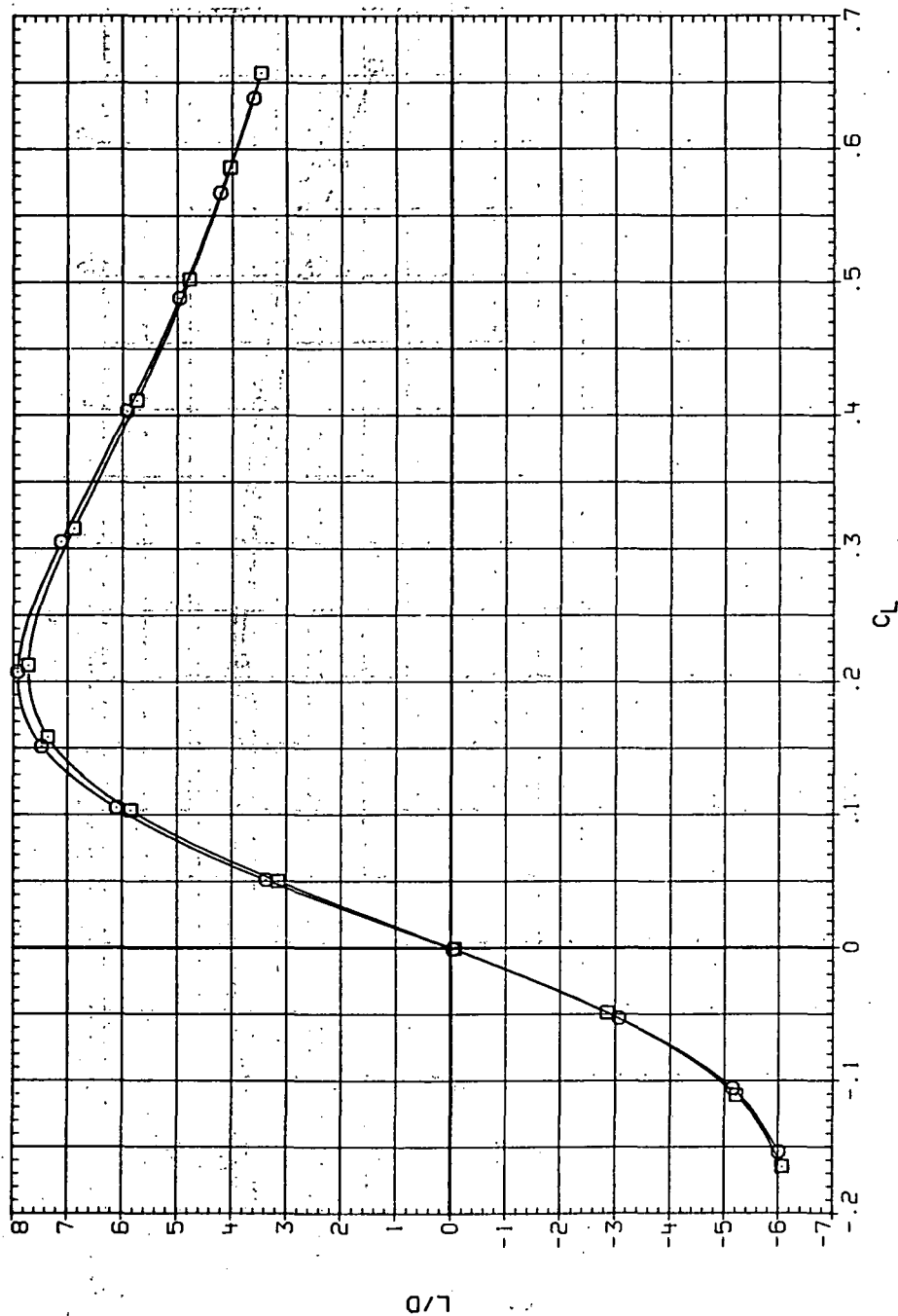


(c) C_m vs C_L .

Figure 74. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR200 74558 (STEEL)
 RJR246 74558 (STEEL)

RY/L Q (NSM)
 6.230 18,600
 8.200 24,400

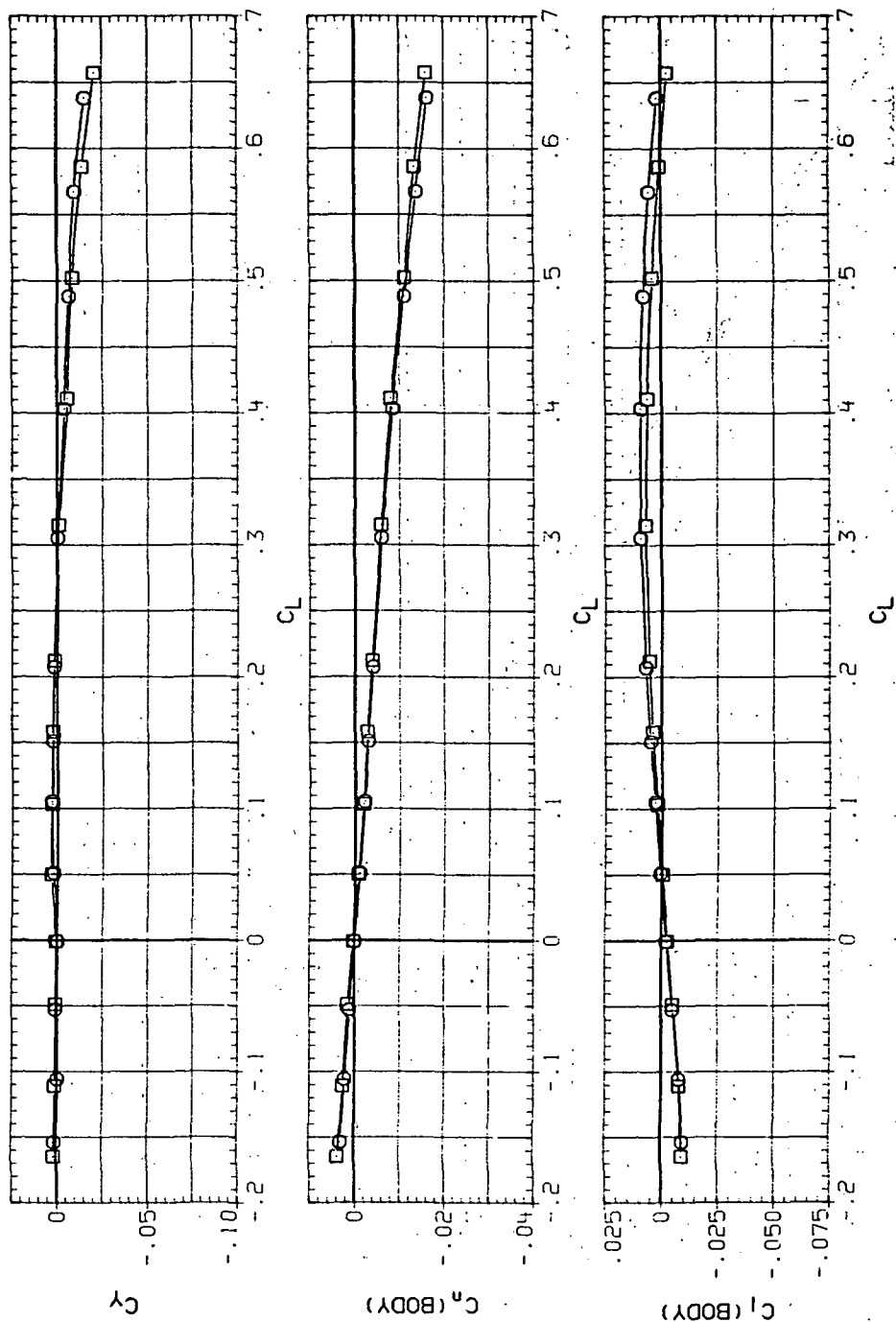


(d) L/D vs C_L .

Figure 74.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR200 74558 (STEEL)
 RJR246 74558 (STEEL)

RN/L Q(NSH)
 6.230 18,600
 8.200 24,400

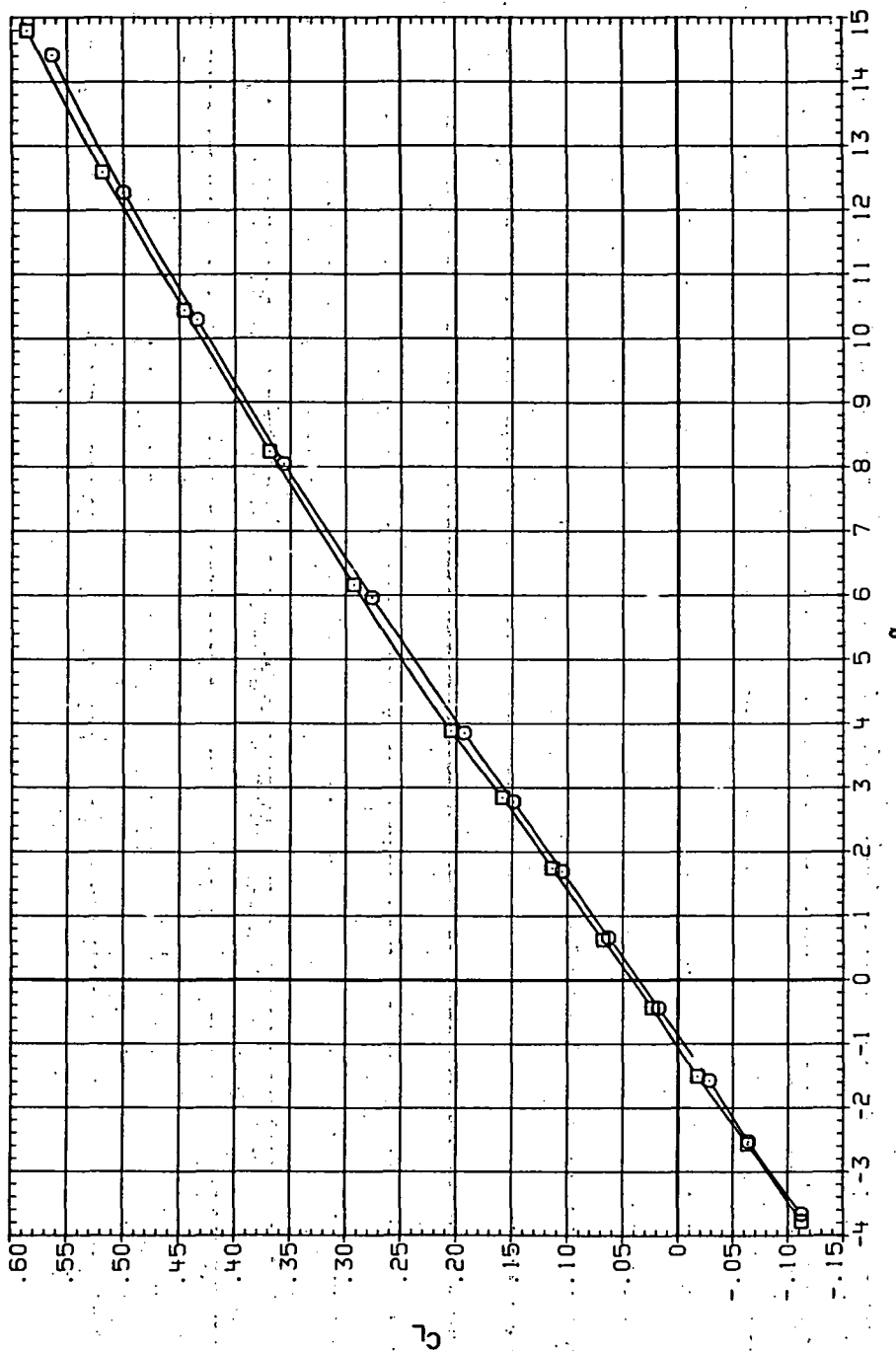


(e) C_Y , C_n and C_l vs C_L .

Figure 74. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR201  7455B (STEEL)
 RJR247  7455B (STEEL)

RN/L Q(NSH)
 6.230 18.500
 8.200 24.700

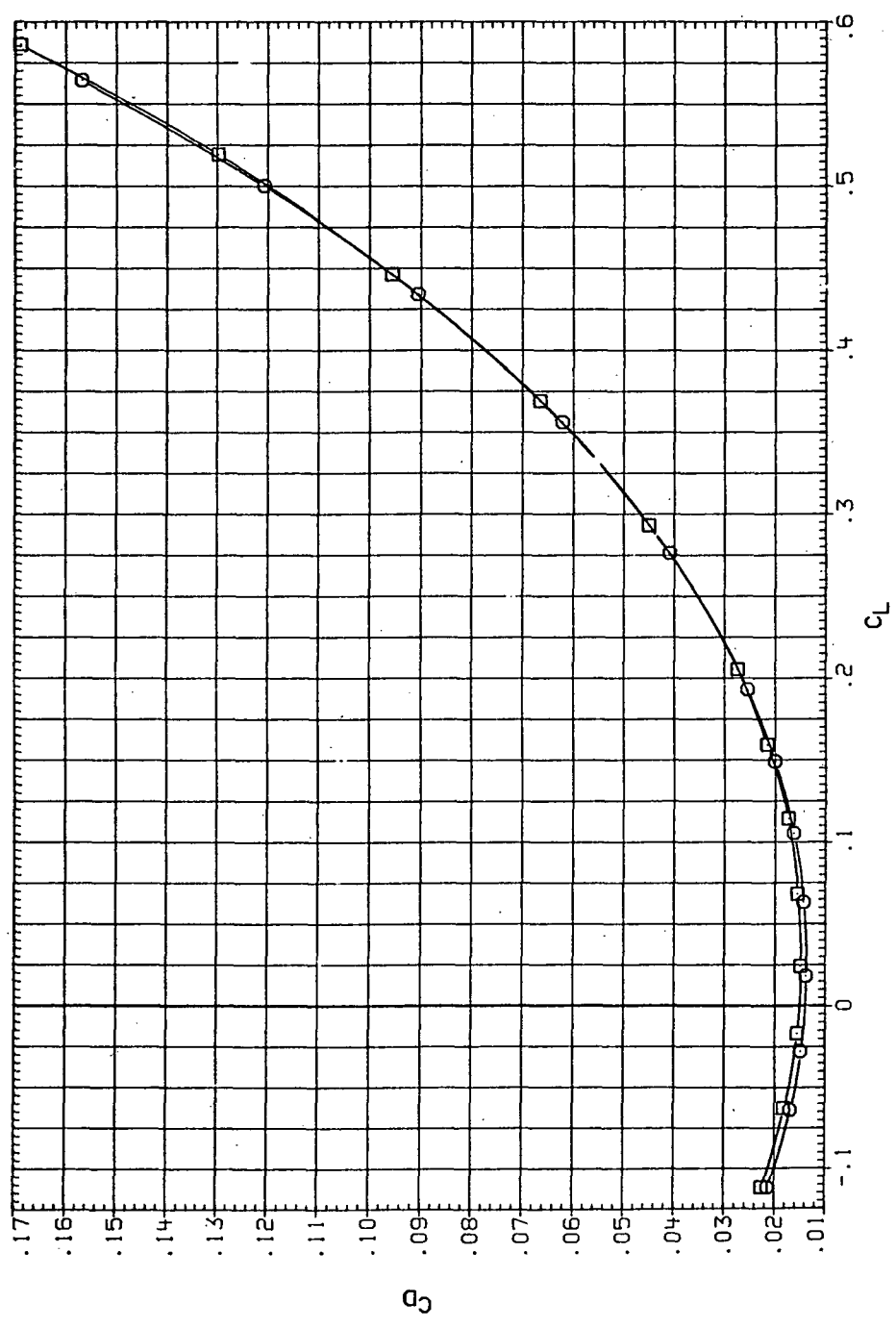


(a) C_L vs α .

Figure 75.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 55^\circ$, $M = 2.0$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR201 ○ 7M55B (STEEL)
 RJR247 □ 7M55B (STEEL)

RN/L Q(NSM)
 6.230 18.500
 8.200 24.700

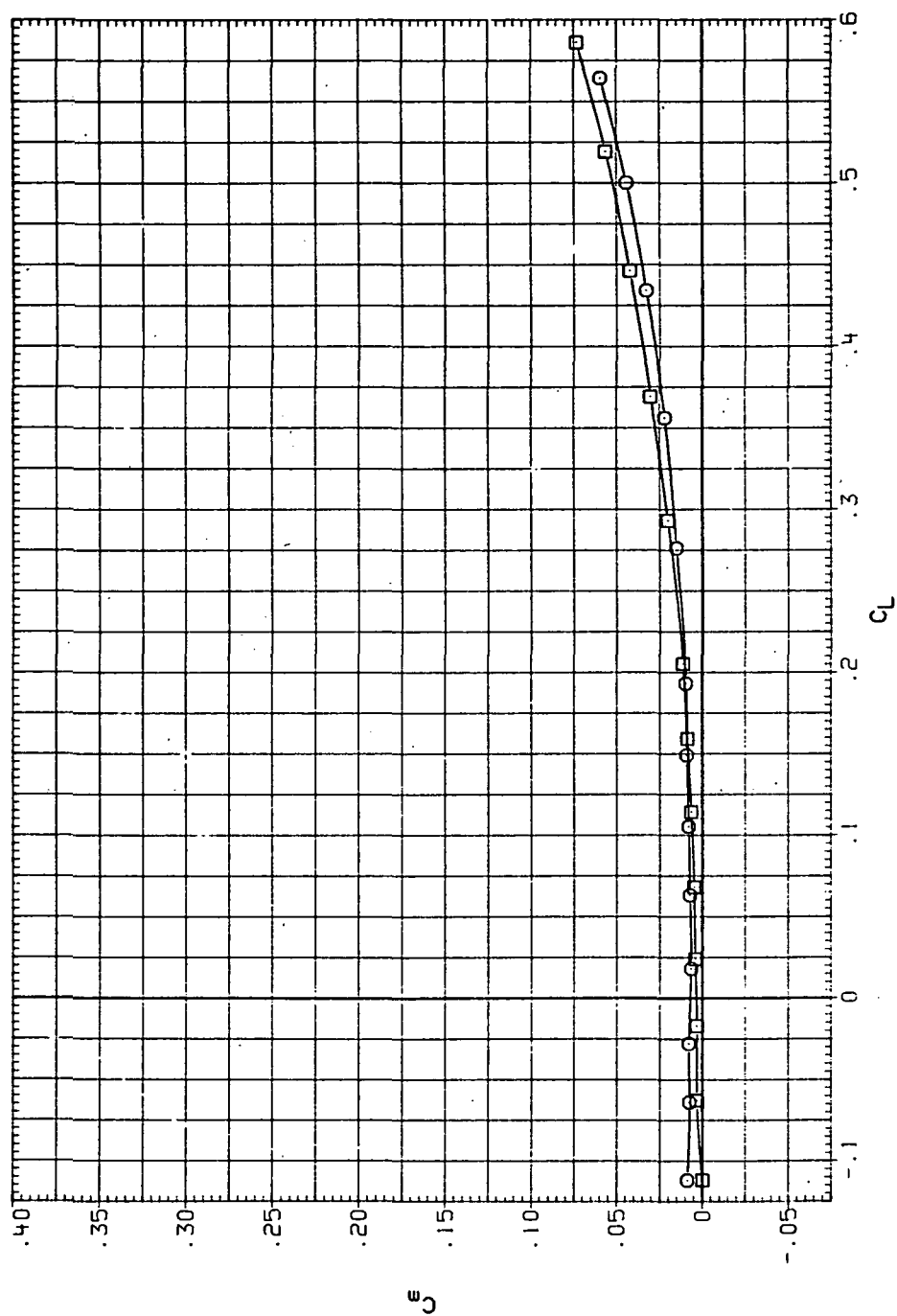


(b) C_D vs C_L .

Figure 75.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR201 $\square$ 7455B (STEEL)
 RJR247 $\square$ 7455B (STEEL)

RN/L Q(NSH)
 6.230 18.500
 8.200 24.700

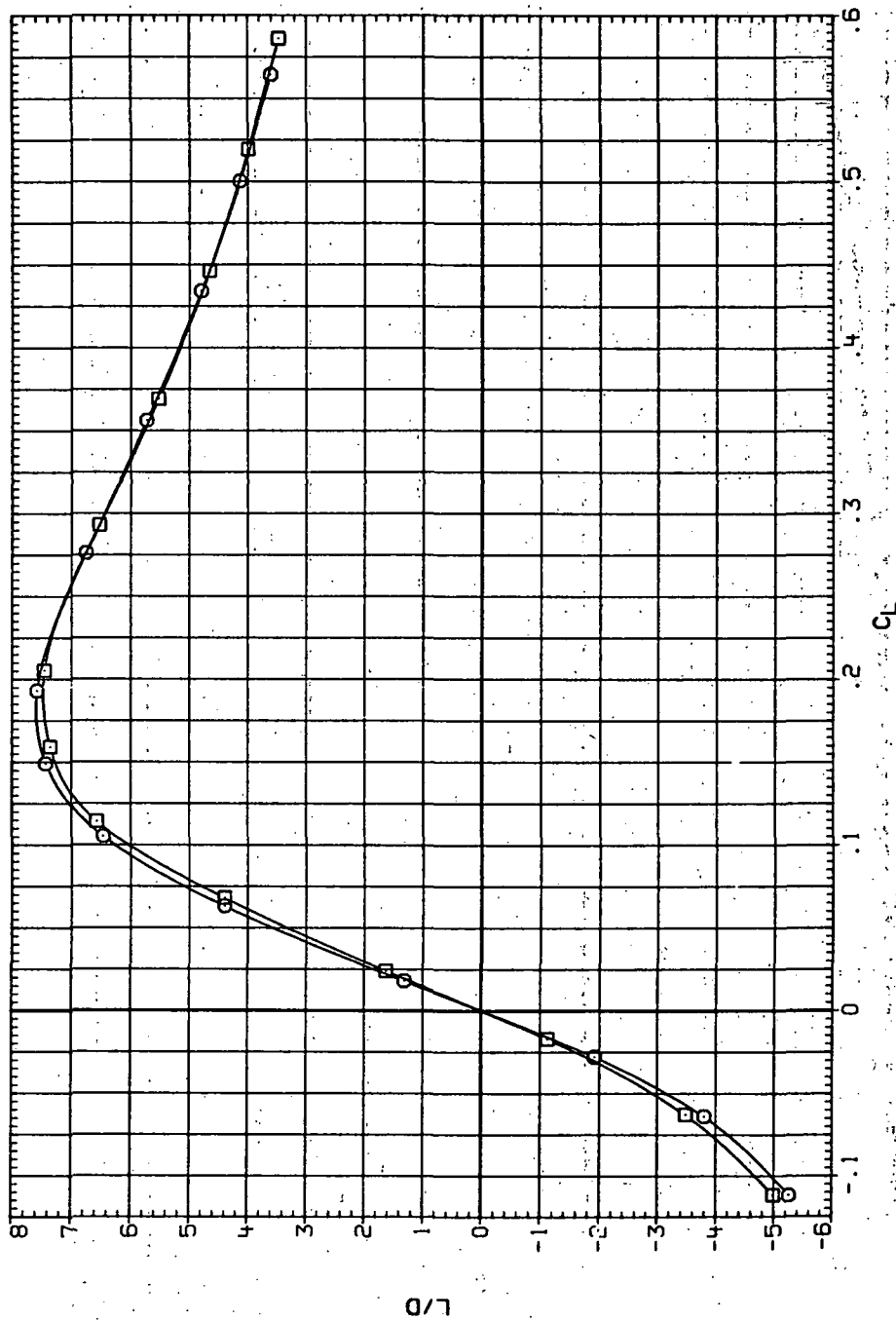


(c) C_m vs C_L .

Figure 75.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR201 $\square$ 7455B (STEEL)
 RJR247 $\circ$ 7455B (STEEL)

RV/L Q (NSH)
 6.230 18.500
 8.200 24.700

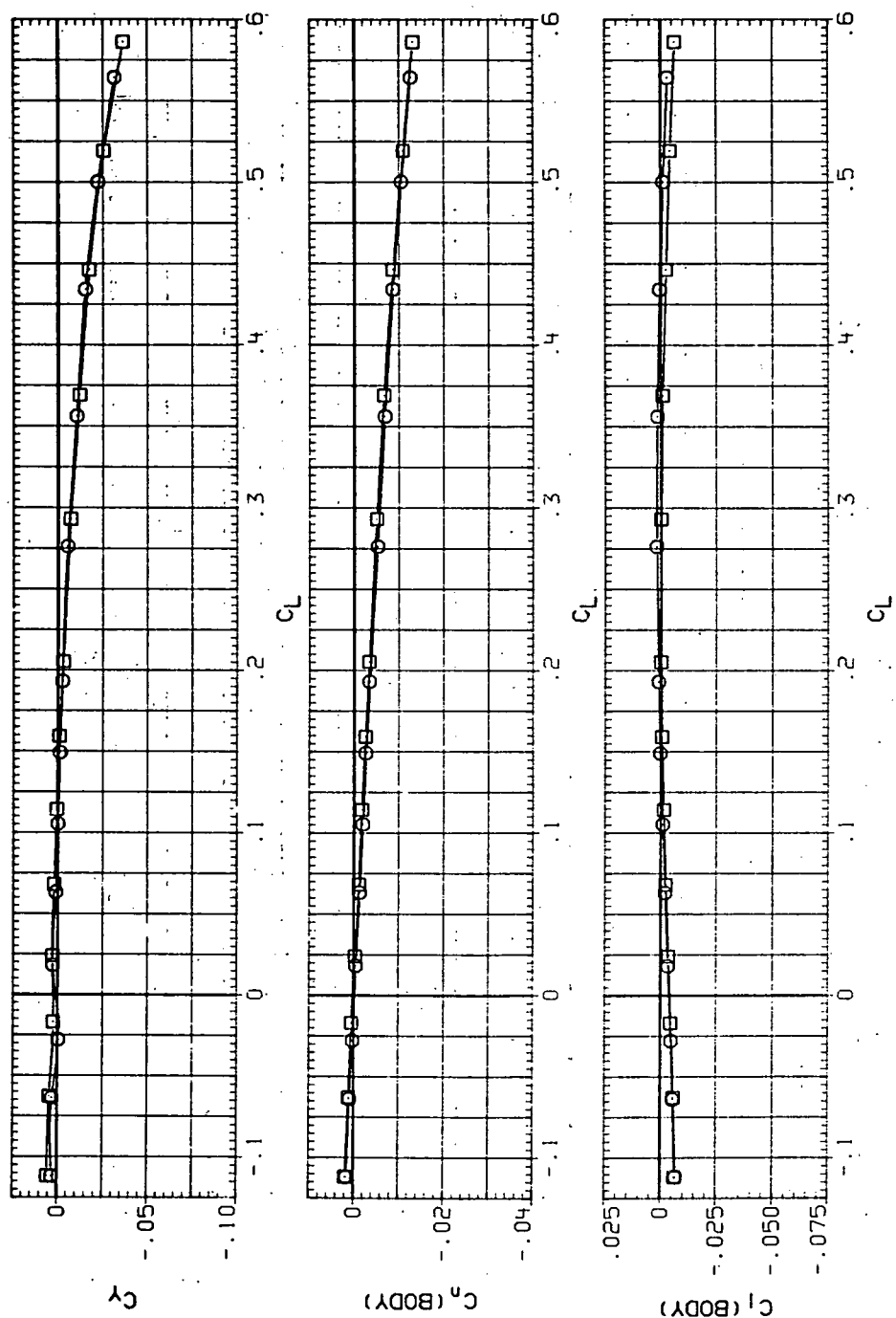


(d) L/D vs C_L .

Figure 75.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJB201 7W55B (STEEL)
 RJB47 7W55B (STEEL)

RN/L 0 (NSM)
 8.230 18.500
 8.200 24.700



(e) C_Y , C_n and C_l vs C_L .

Figure 75.— Concluded.

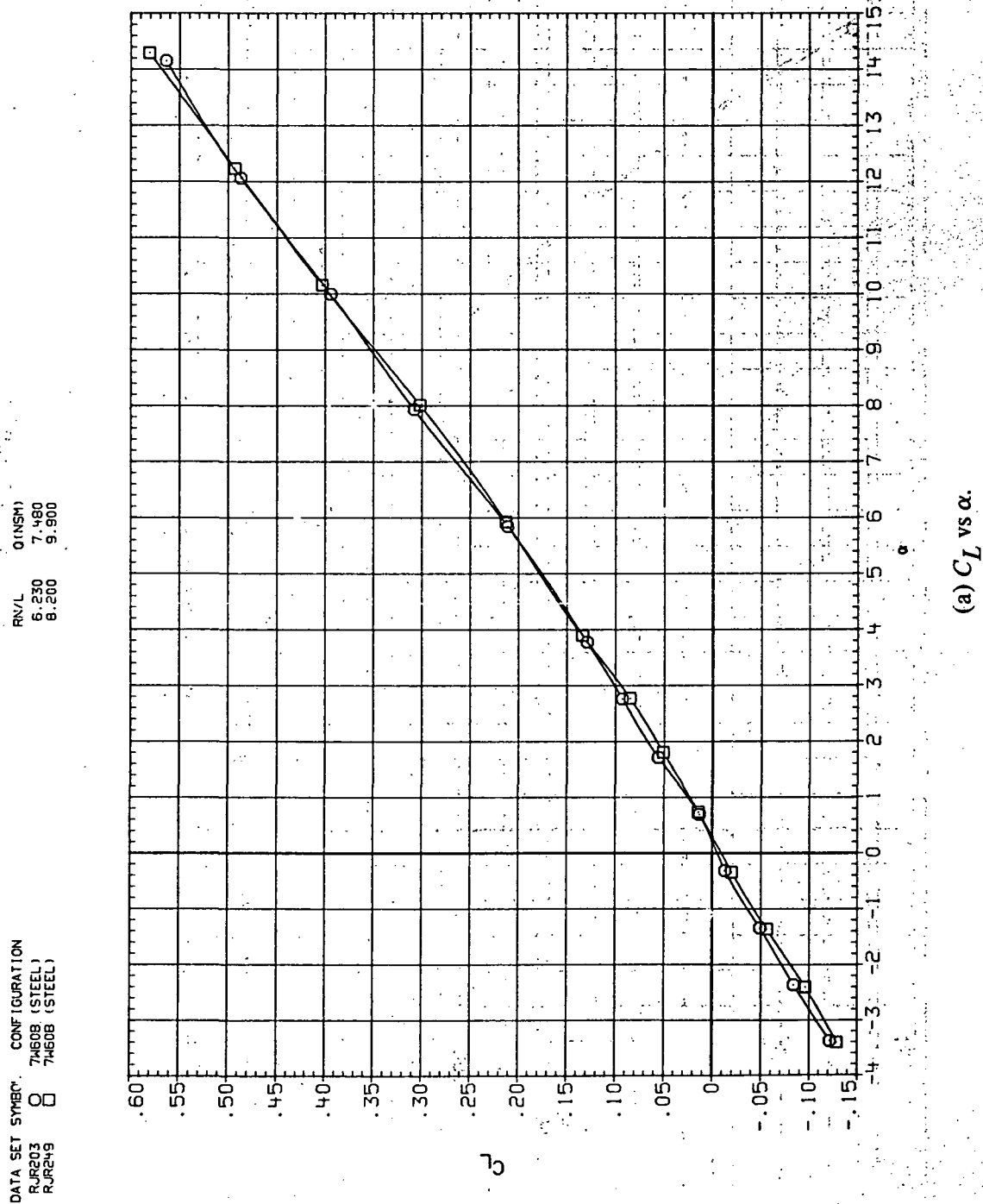
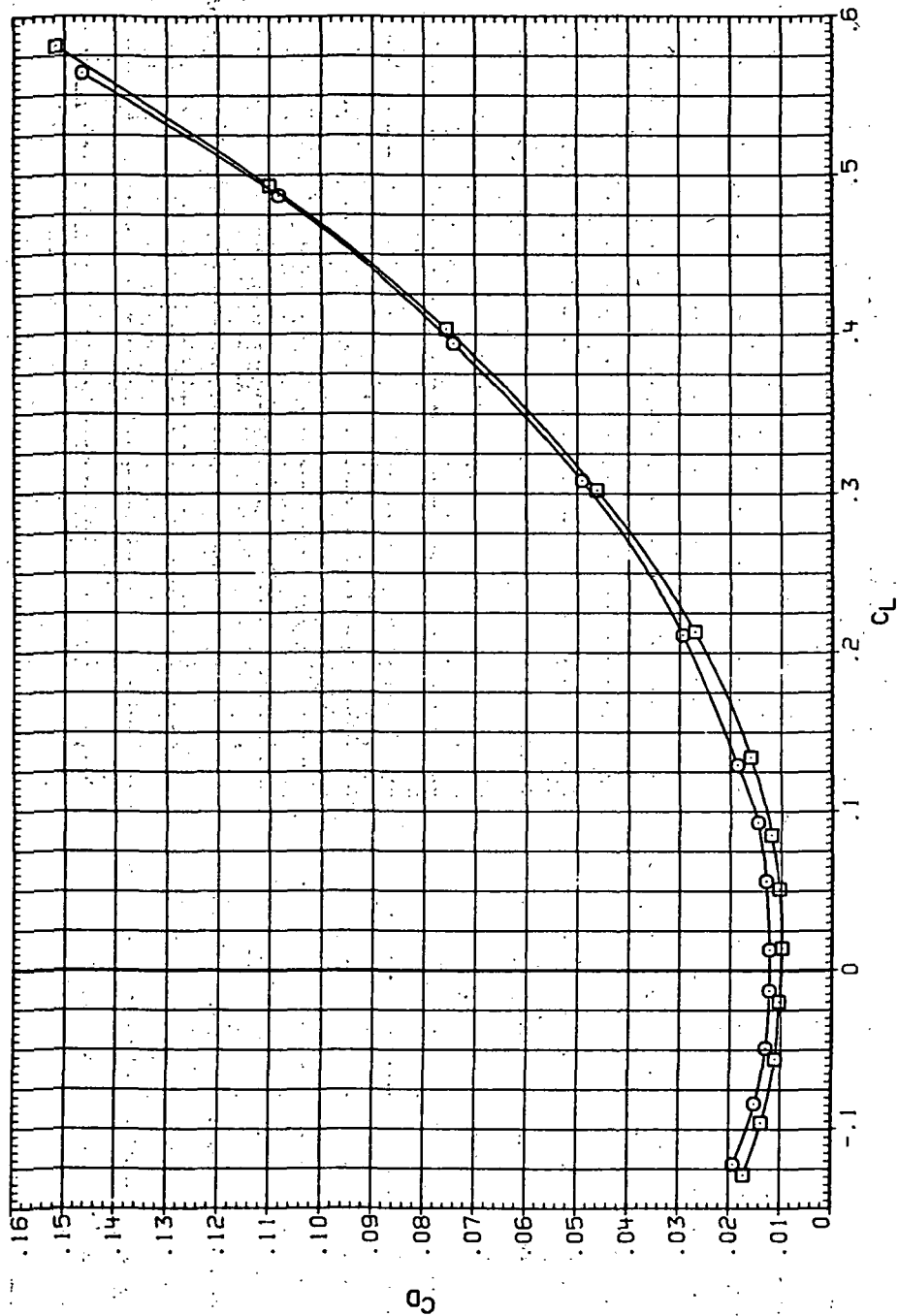


Figure 76. — Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.4$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION:
 RJR203 ○ 74608 (STEEL)
 RJR249 □ 74608 (STEEL)

RV/L Q1NSH1
 6.230 7.480
 8.200 9.900

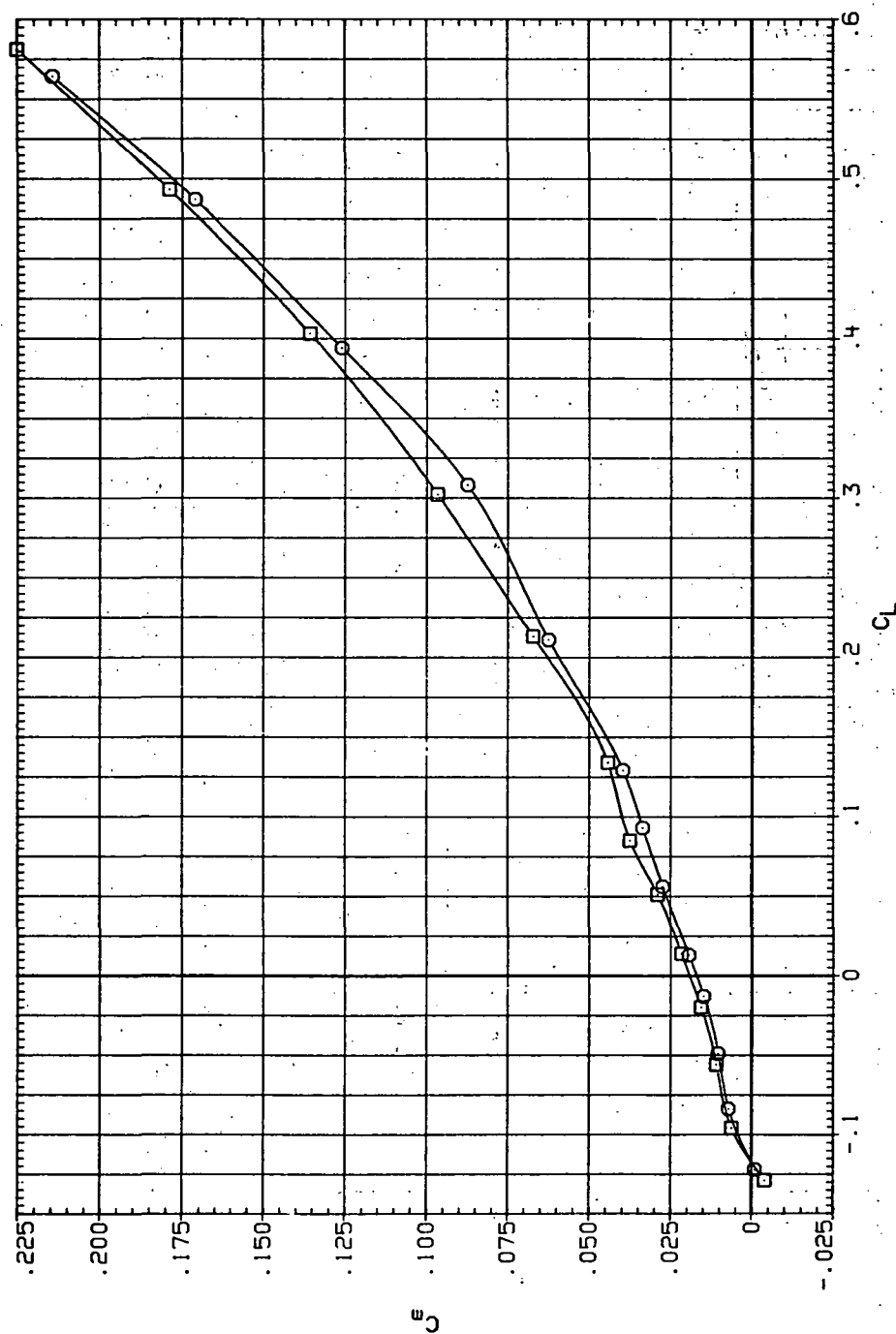


(b) C_D vs C_L

Figure 76.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR203 ○ 7450B (STEEL)
 RJR249 □ 7450B (STEEL)

RN/L Q(NSH)
 6.230 7.48°
 8.200 9.900

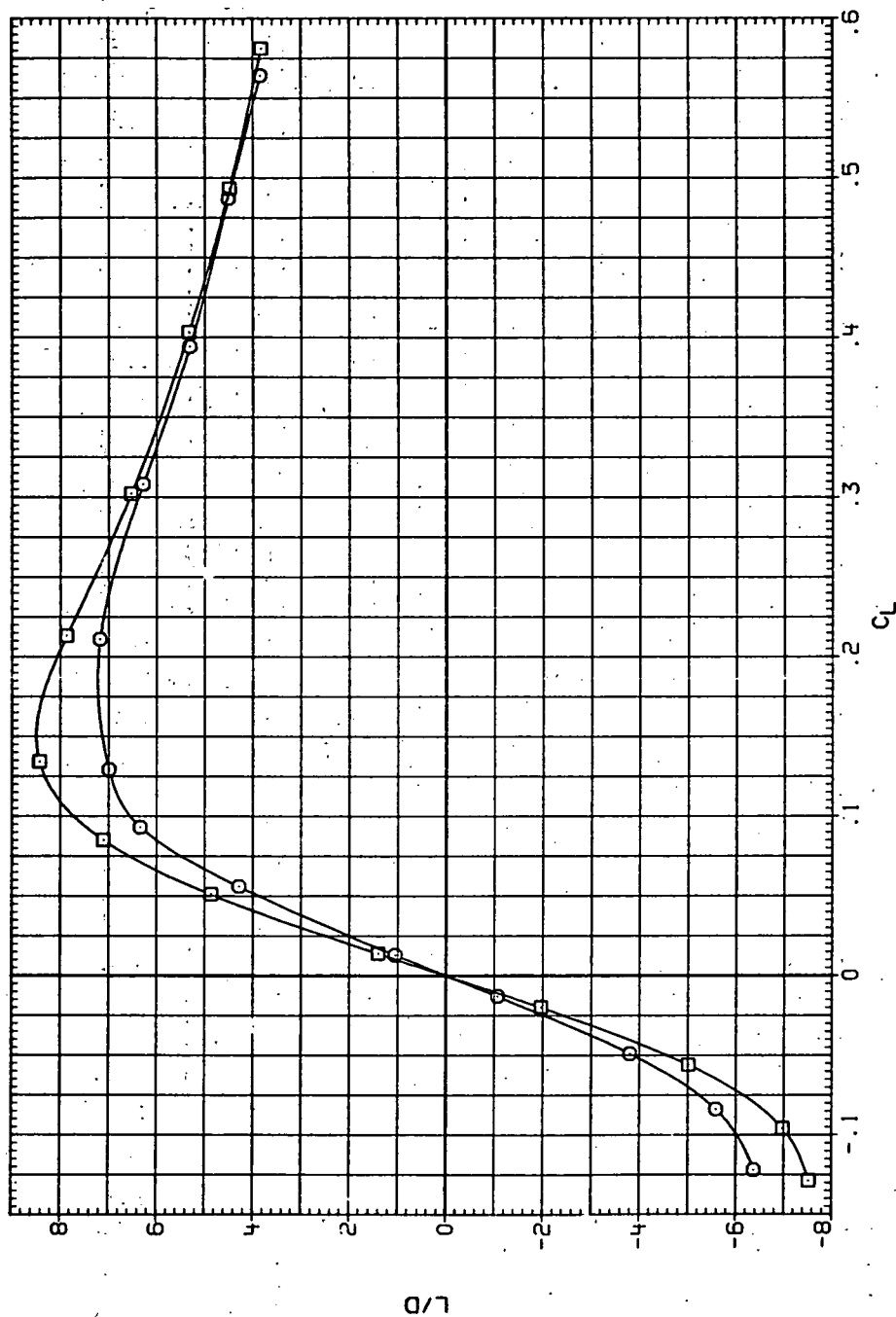


(c) C_m vs C_L .

Figure 76.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJB203 7450B (STEEL)
 RJB249 7450B (STEEL)

RV/L Q(NSH)
 6.230 7.480
 8.200 9.900

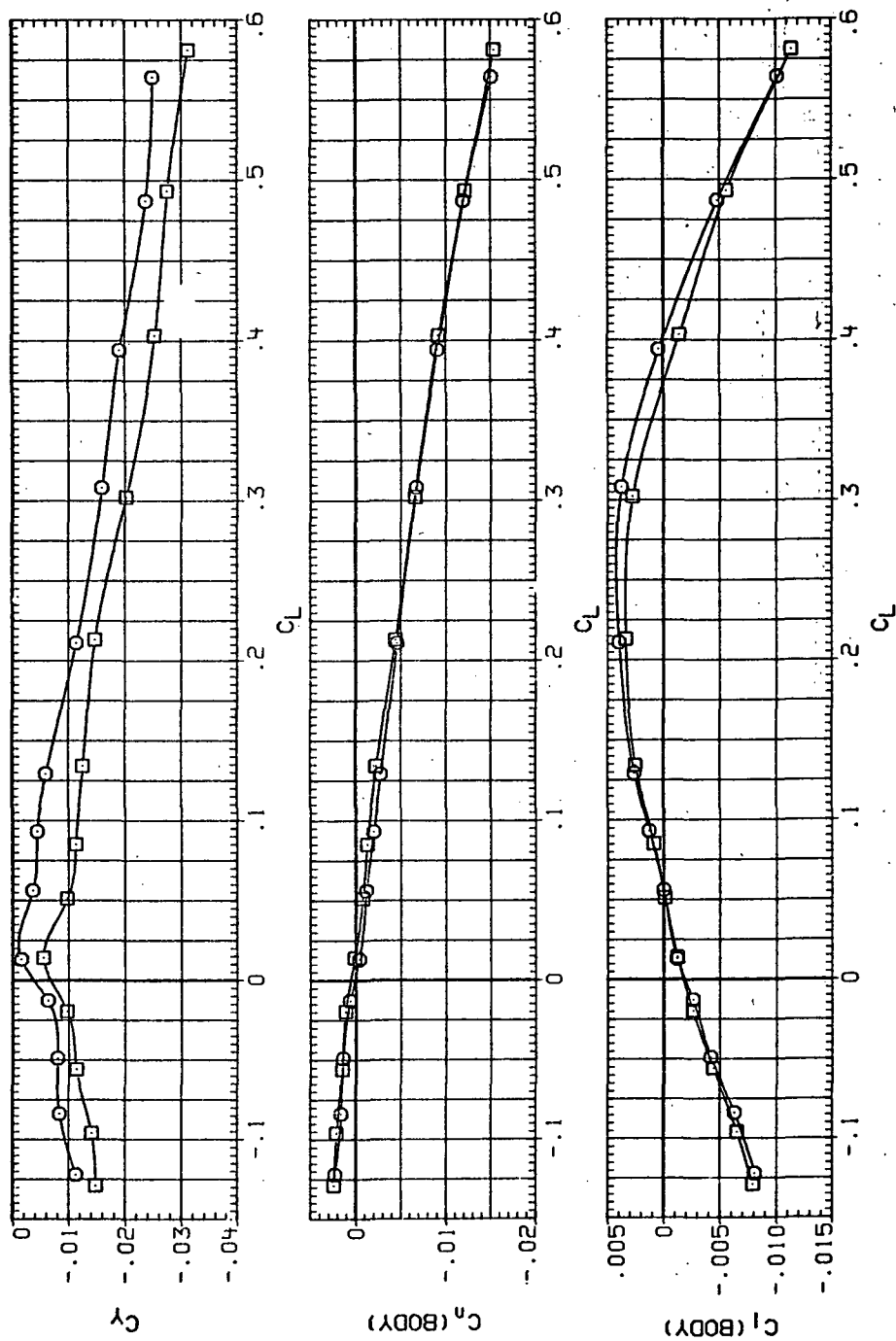


(d) L/D vs C_L .

Figure 76.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR203 ○ 74608 (STEEL)
 RJR249 □ 74608 (STEEL)

RN/L Q(NSH)
 6.230 7.480
 8.200 9.900

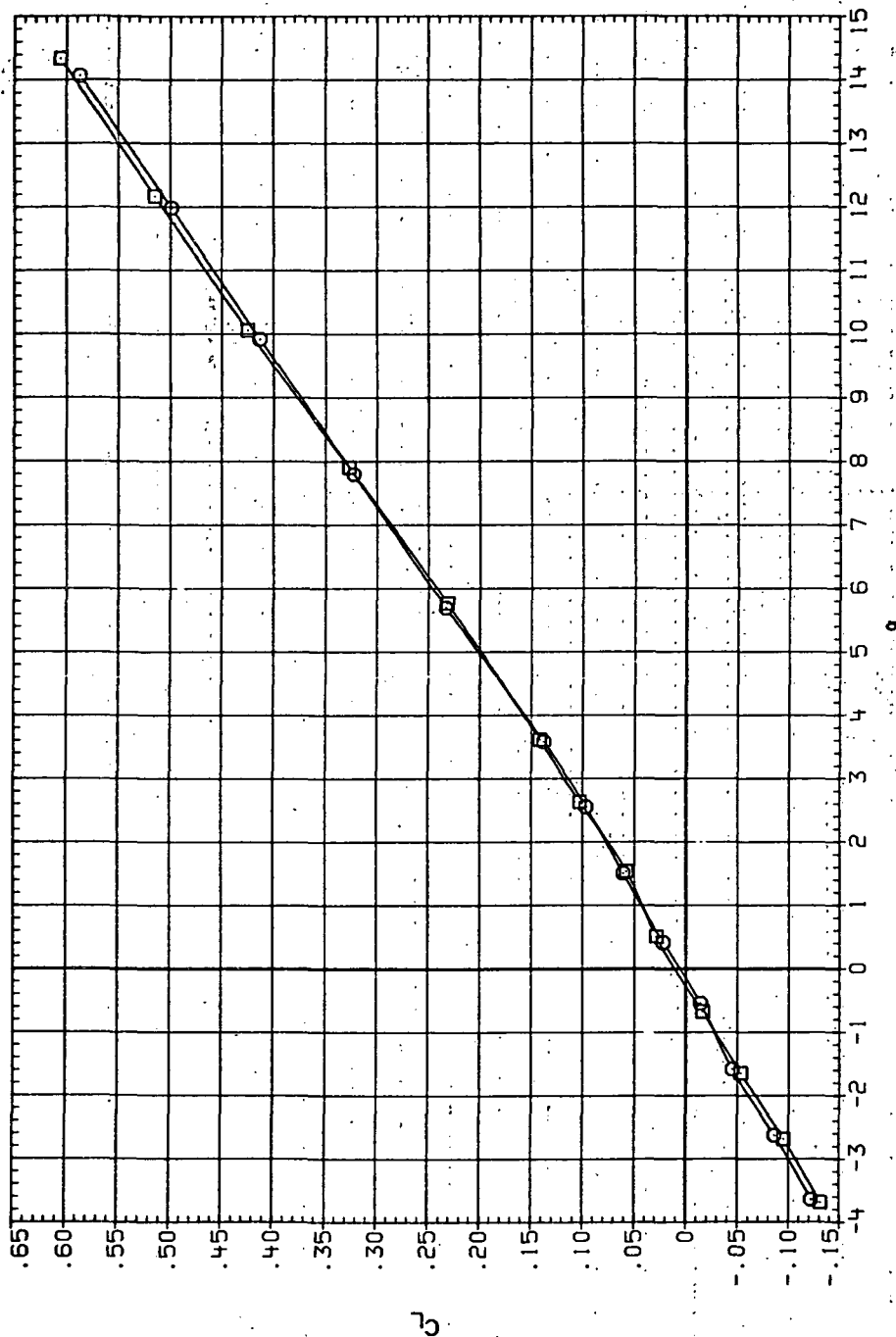


(e) C_Y , C_n and C_l vs C_L .

Figure 76.— Concluded.

DATA SET: SYMBOL CONFIGURATION
 RUR204 ☐ 74508 (STEEL)
 RUR250 ☐ 74608 (STEEL)

RV/L Q(NSM)
 6.230 10.600
 8.200 14.100

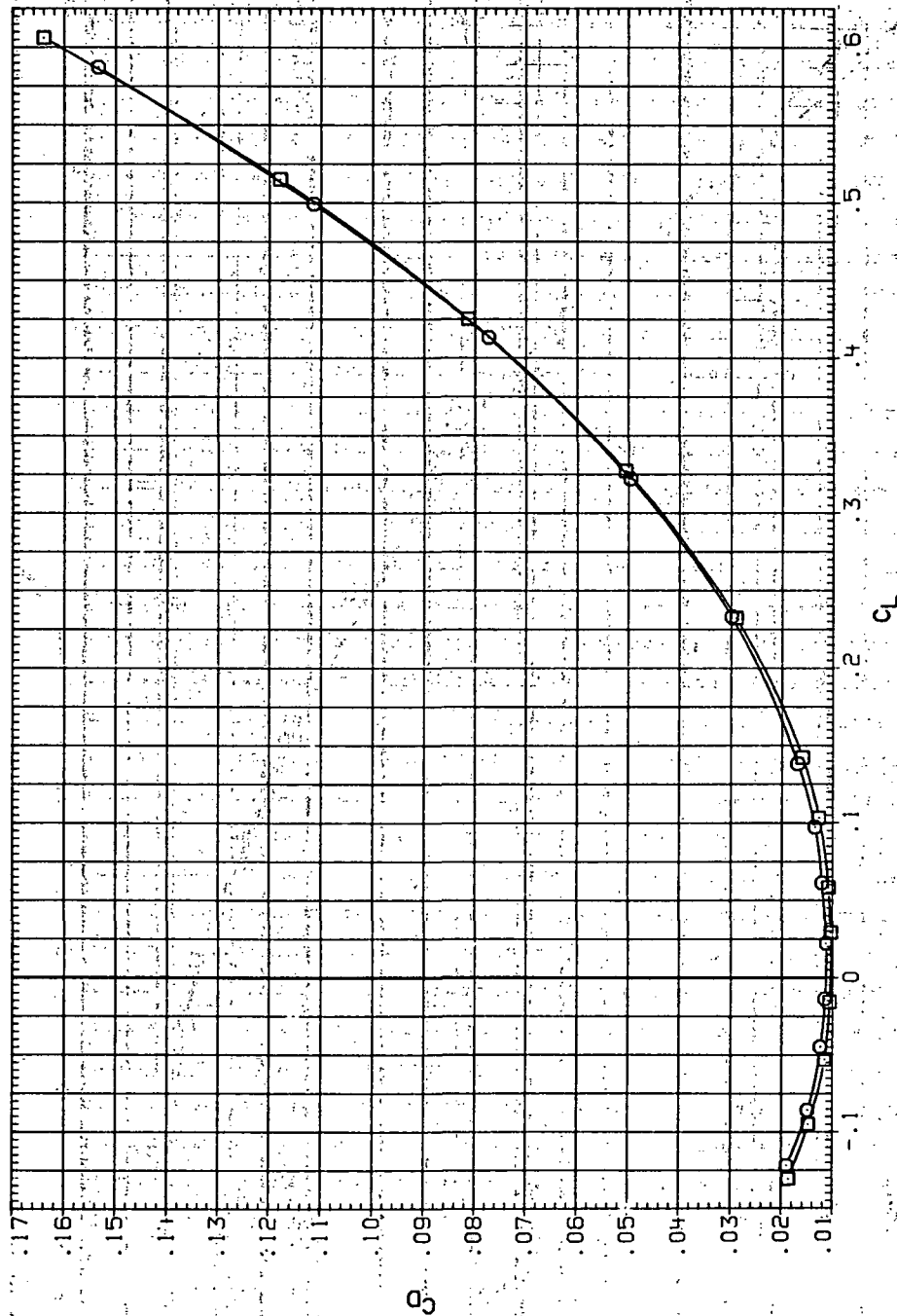


(a) C_L vs α .

Figure 77.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR204 74608 (STEEL)
 RJR250 74609 (STEEL)

RV/L Q(NSM)
 5.230 10.600
 8.200 14.100

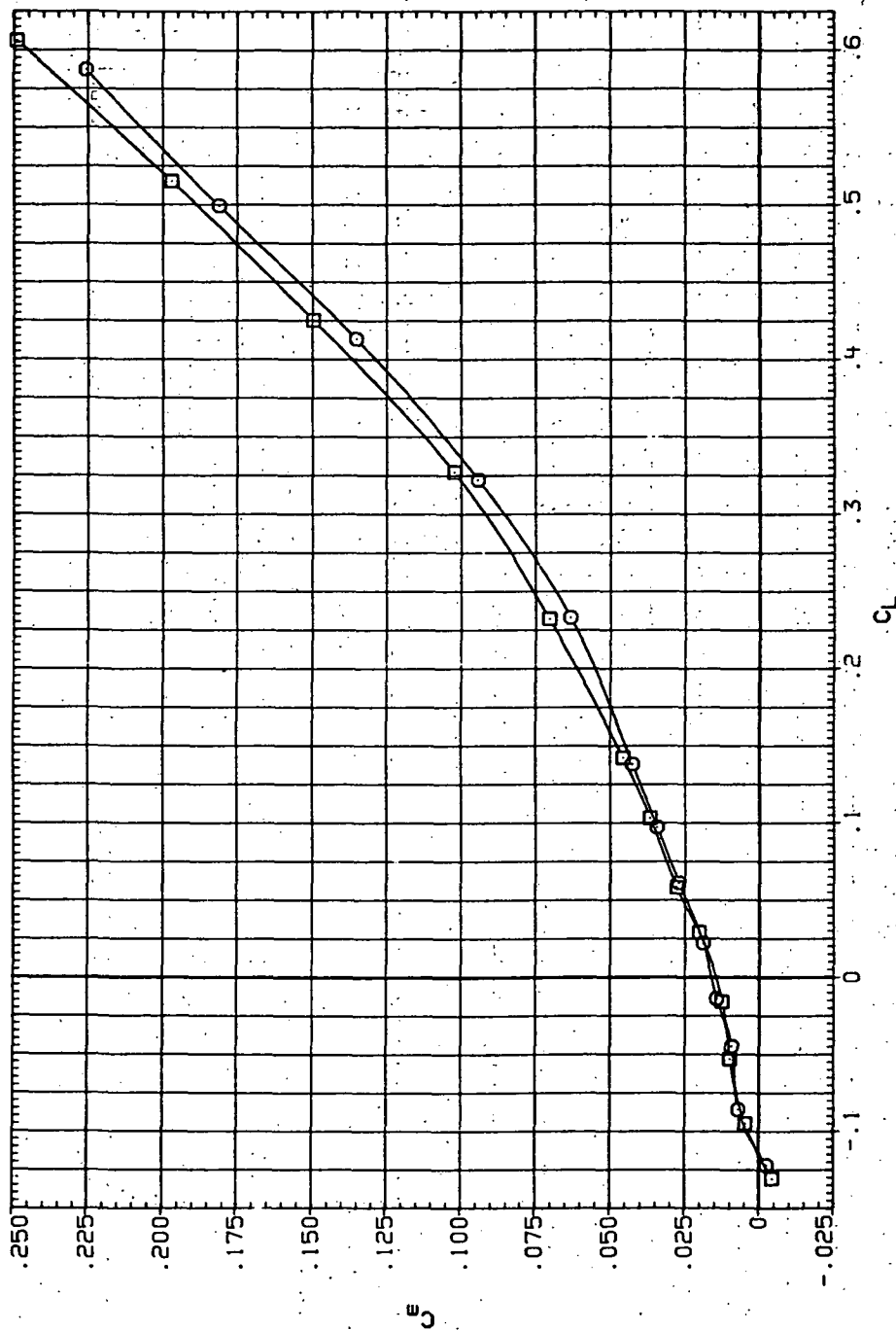


(b) C_D vs C_L .

Figure 77. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR204 74608 (STEEL)
 RJR250 74608 (STEEL)

RN/L Q(NSH)
 6.230 10.600
 8.200 14.100

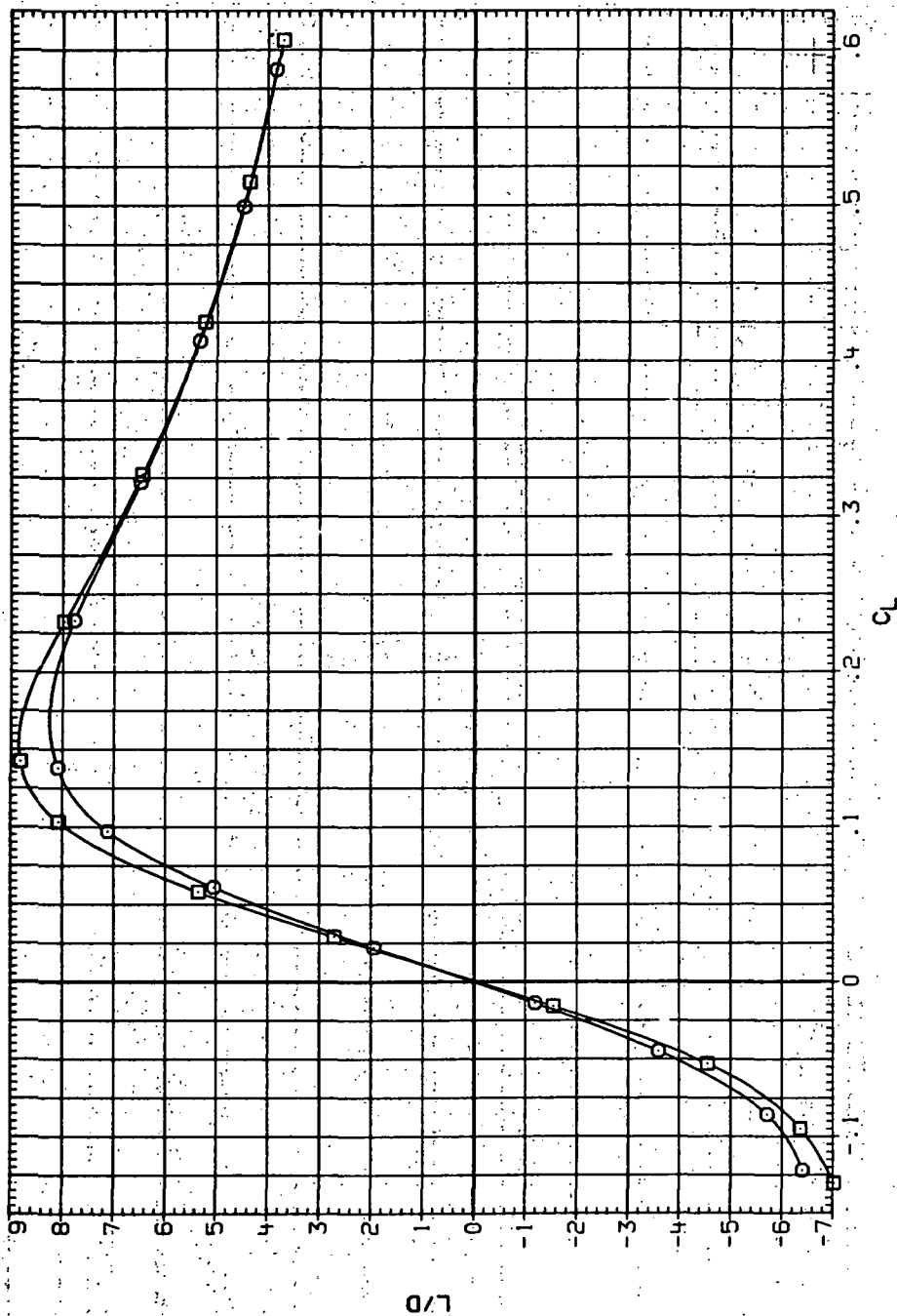


(c) C_m vs C_L .

Figure 77.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR204 74608 (STEEL)
 RJR250 74608 (STEEL)

RV/L Q(NSH)
 6.230 10.600
 8.200 14.100

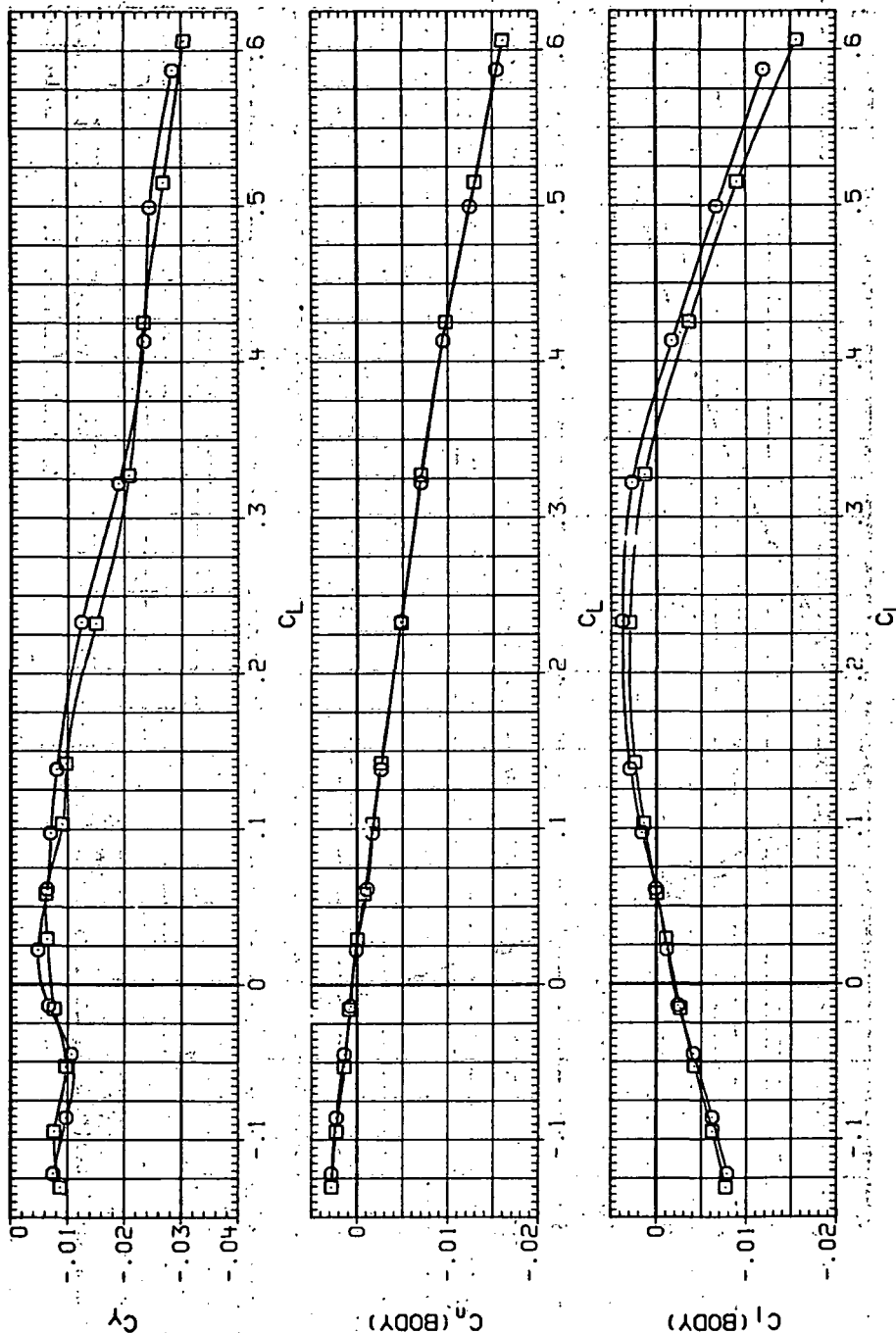


(d) L/D vs C_L .

Figure 77.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR204 7450B (STEEL)
 RJR250 7450B (STEEL)

RN/L Q(NSM)
 6.230 10.600
 8.260 14.100

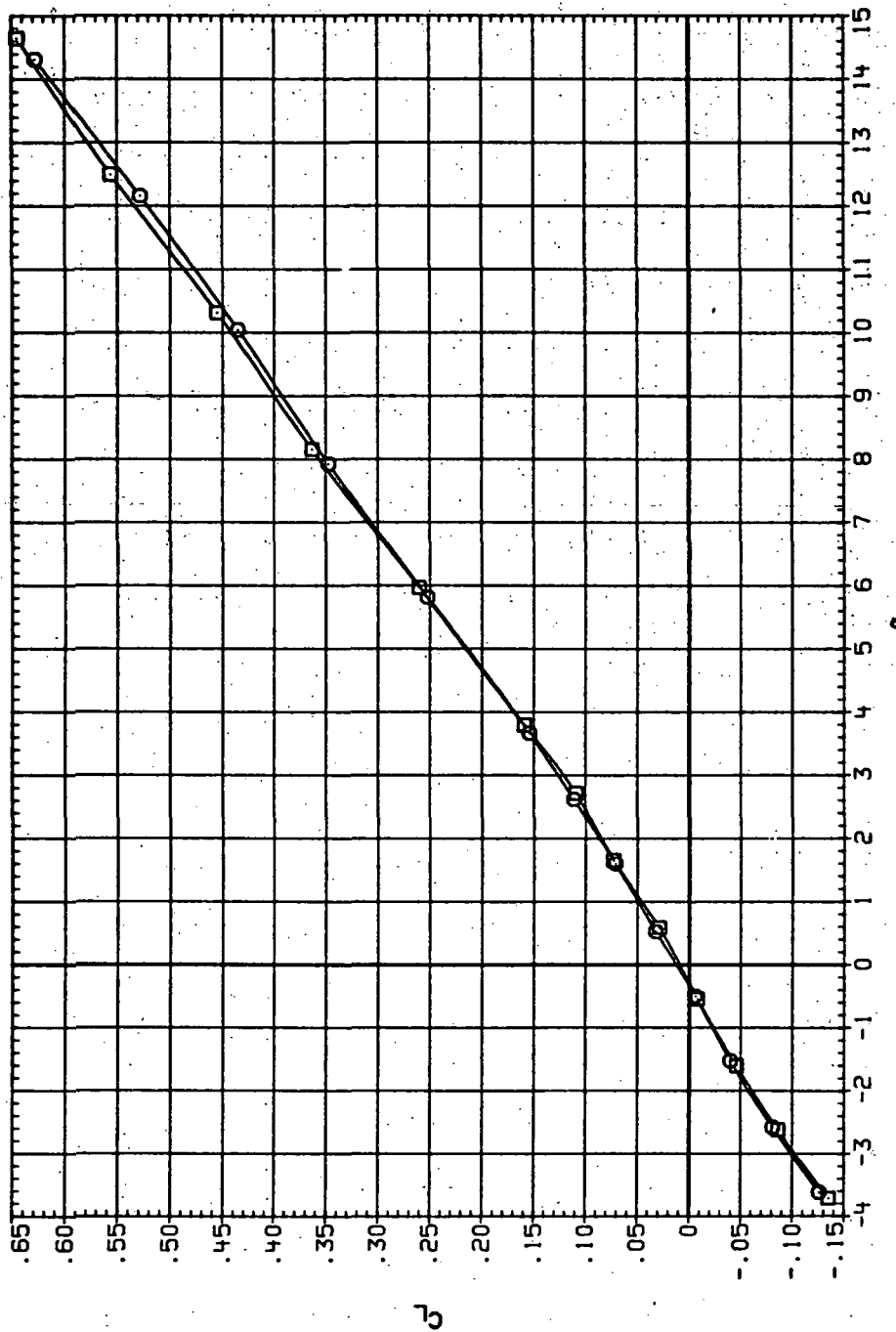


(e) C_Y , C_n and C_l vs C_L

Figure 77.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RUP205 $\square$ 74608 (STEEL)
 RUP251 $\circ$ 74608 (STEEL)

RV/L Q(INS)
 6.230 13.400
 8.200 17.800

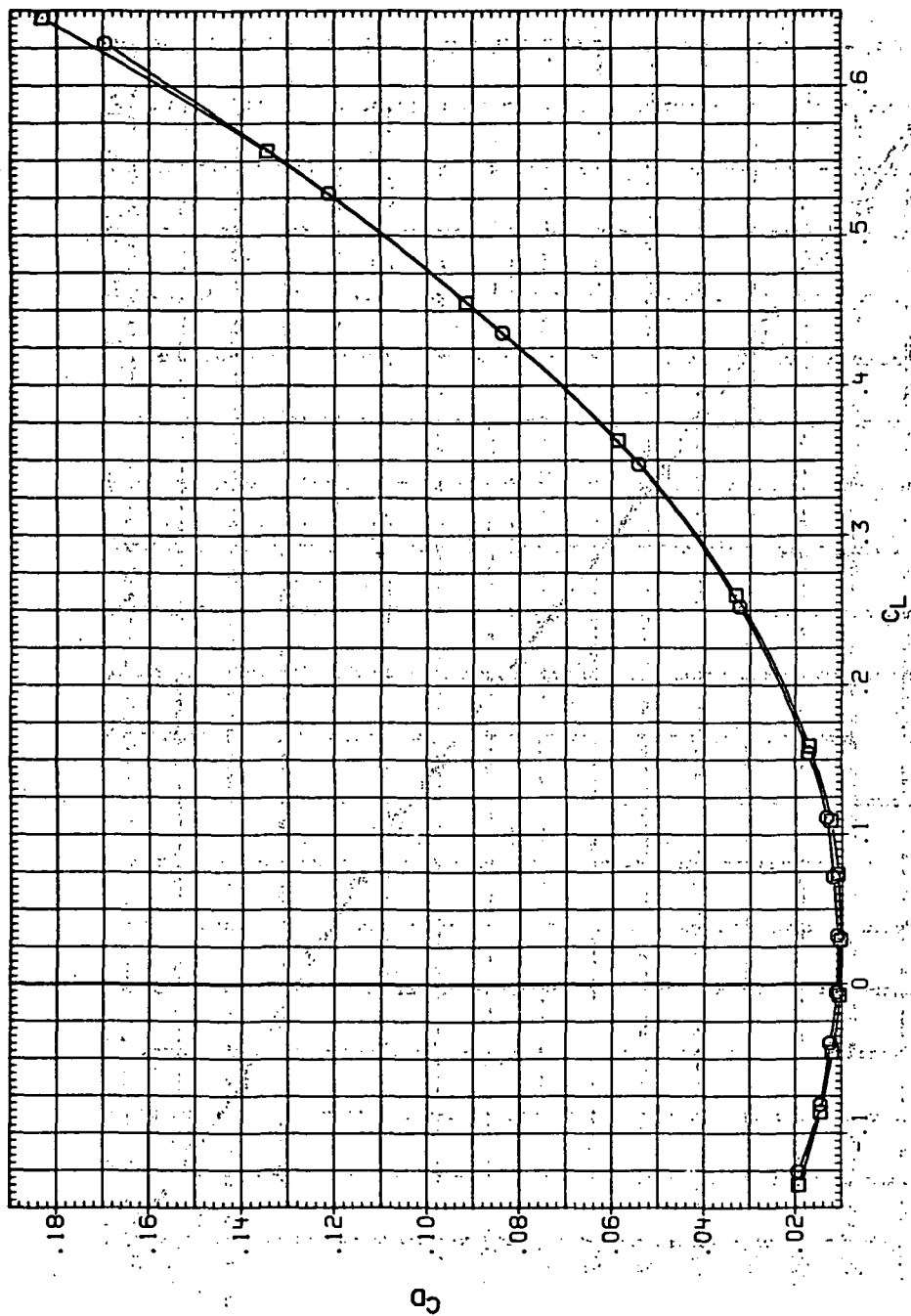


(a) C_L vs α .

Figure 78.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION:
 R0205 74608 (STEEL)
 R0251 74608 (STEEL)

W/L Q(NSH)
 8.230 13.400
 8.200 17.800

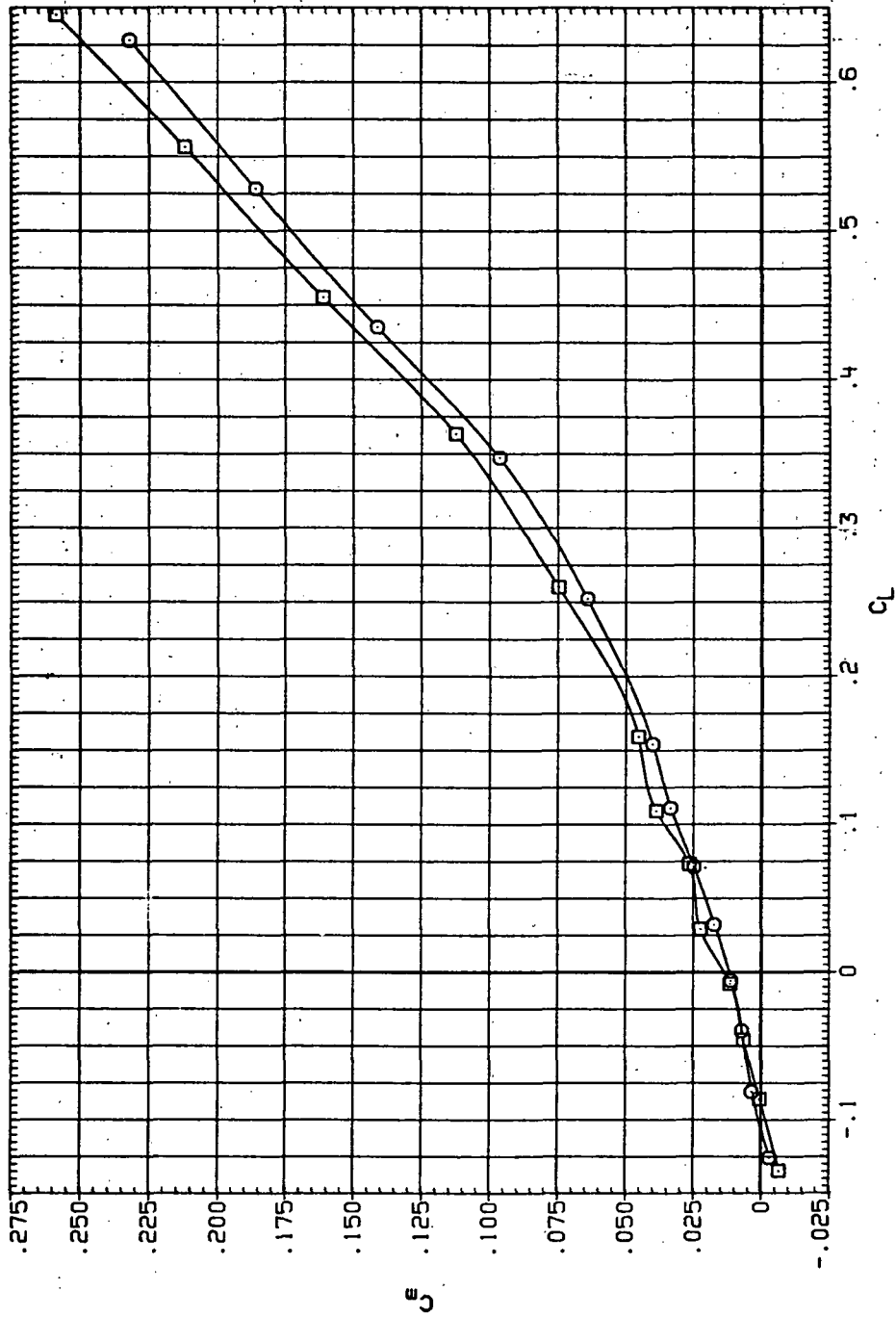


(b) C_D vs C_L .

Figure 78. Continued.

DATA SET SYMBOL CONFIGURATION
 RJR205 7460B (STEEL)
 RJR201 7460B (STEEL)

RV/L Q(NSH)
 6.230 13.400
 8.200 17.800

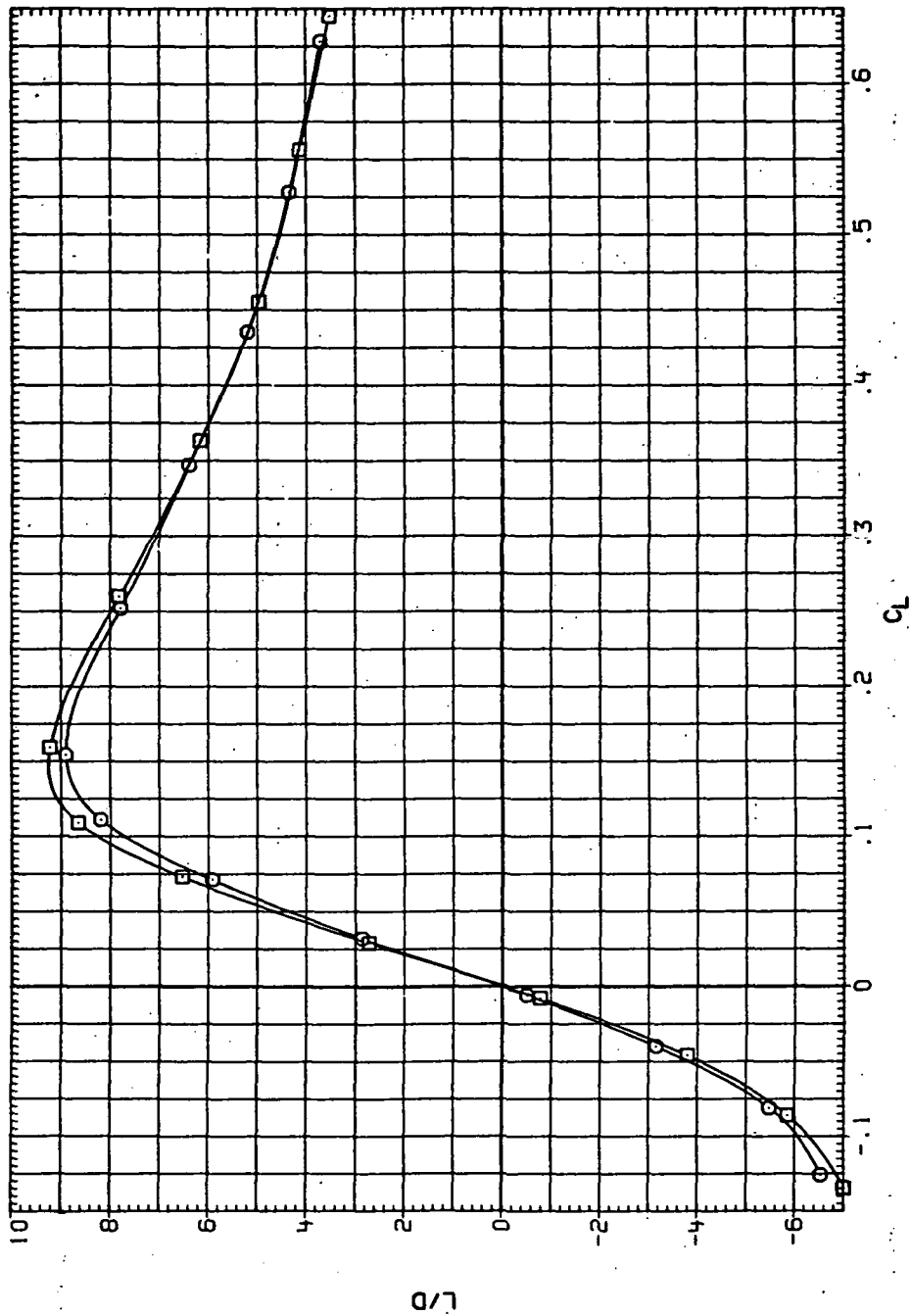


(c) C_m vs C_L .

Figure 78.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR205 7N608 (STEEL)
 RJR251 7N608 (STEEL)

RN/L Q(NSH)
 8.230 13.400
 8.200 17.800

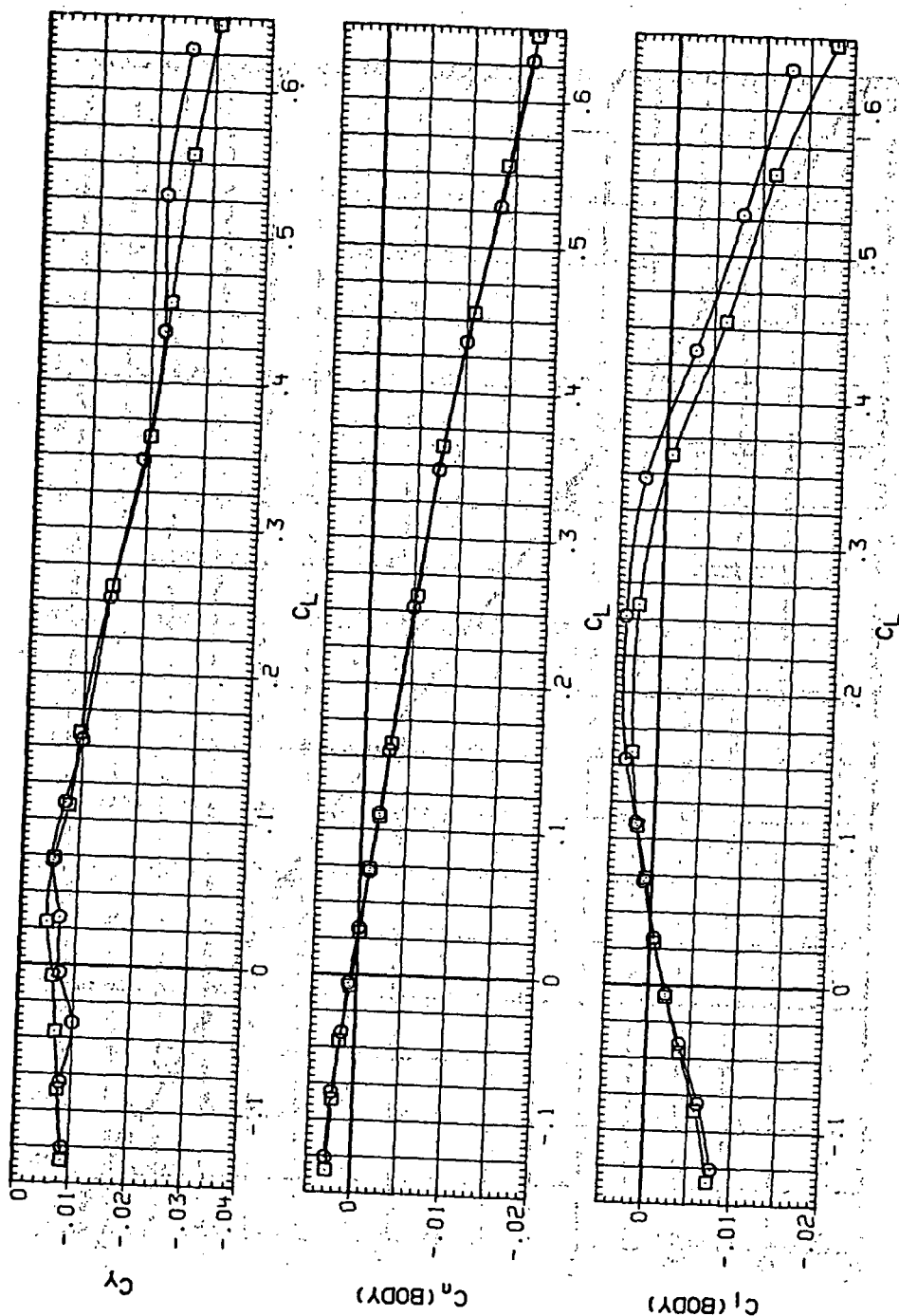


(d) L/D vs C_L .

Figure 78.— Continued.

DATA SET SYMBOL CONFIGURATION
 R.R205 74608 (STEEL)
 R.R251 74608 (STEEL)

RV/L Q(NSH)
 6.230 13.400
 8.200 17.800

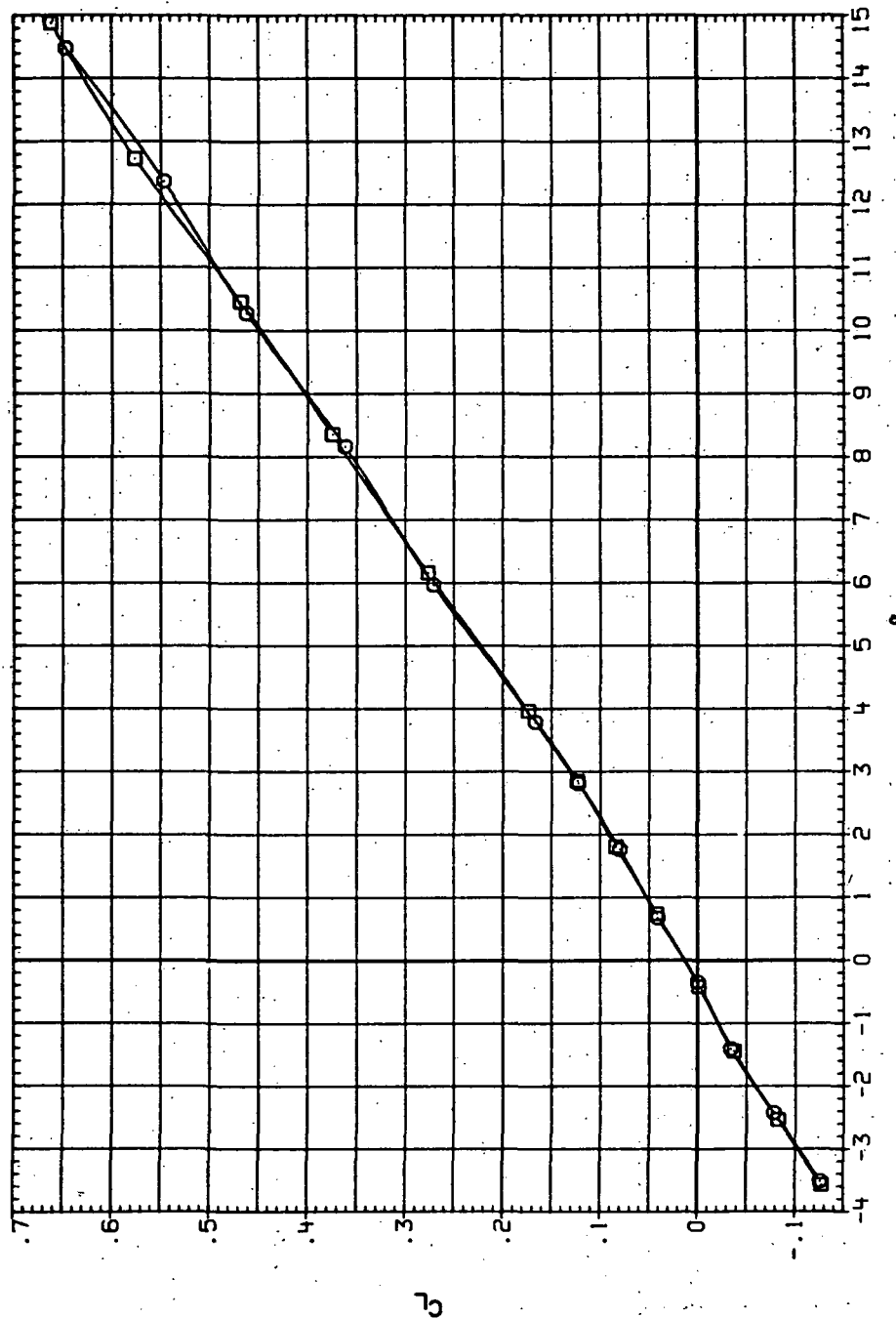


(e) C_Y , C_n and C_l vs C_L .

Figure 78.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJA205 74608 (STEEL)
 RJA252 74608 (STEEL)

RM/L Q(INCH)
 8.230 14.500
 8.200 19.200

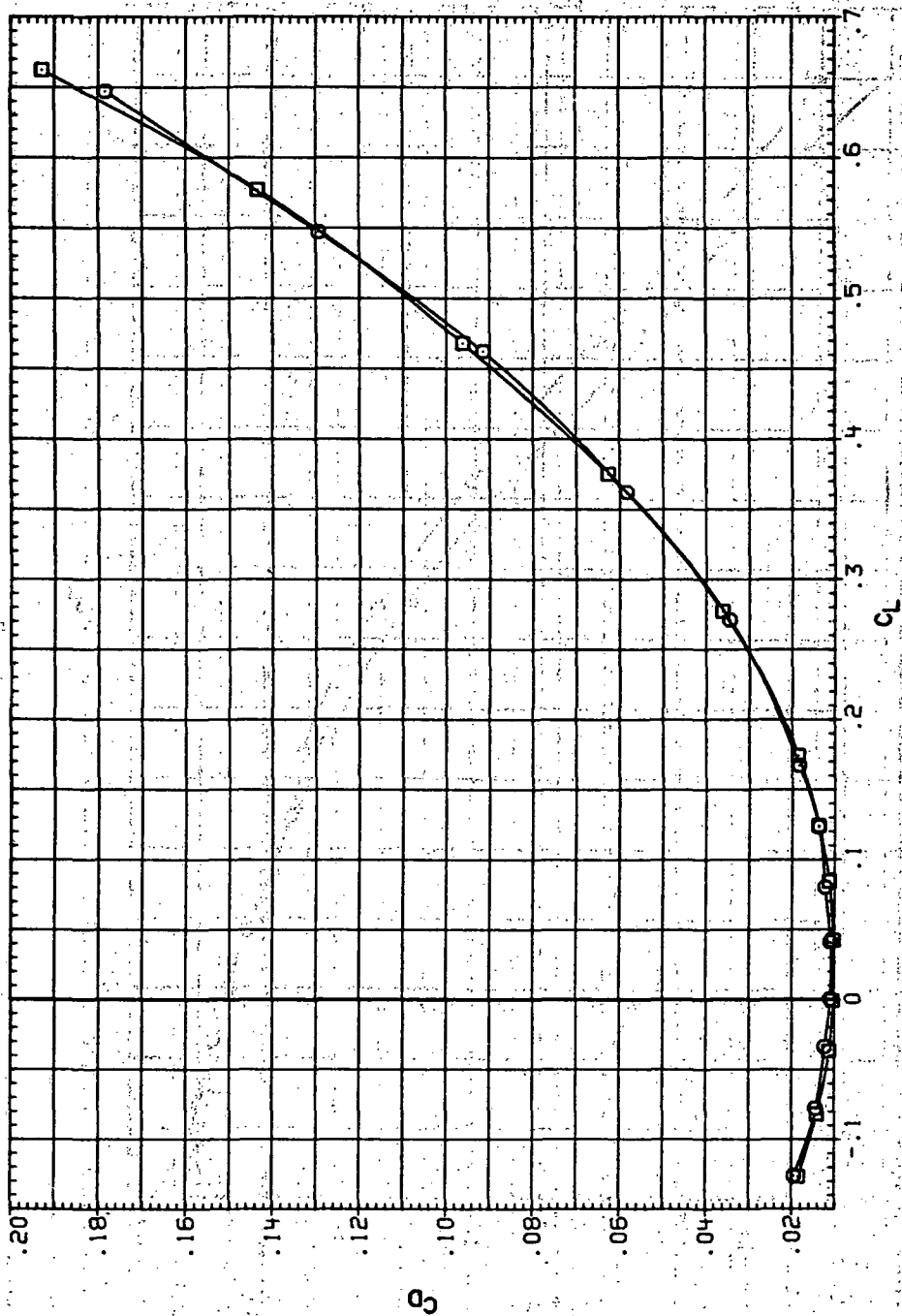


(a) C_L vs α .

Figure 79.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.9$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR206 $\circ$ 74508 (STEEL)
 RJR232 $\square$ 74508 (STEEL)

RV/L Q (INCH)
 6.230 14.500
 8.200 19.200

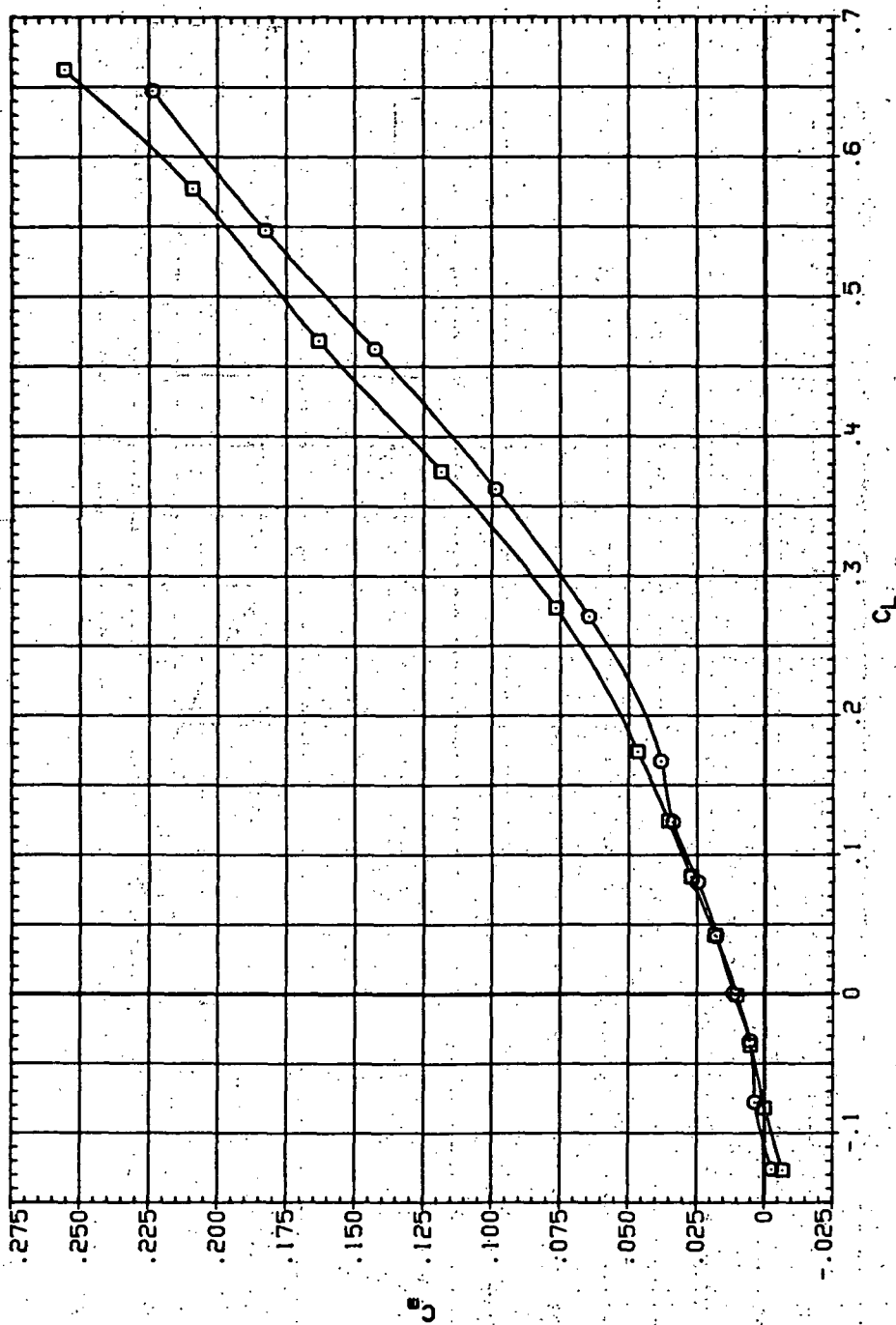


(b) C_D vs C_L .

Figure 79.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 $\square$ 74608 (STEEL)
 RJR232 $\circ$ 74608 (STEEL)

RM/L Q(MSH)
 6.230 14.500
 6.200 19.200

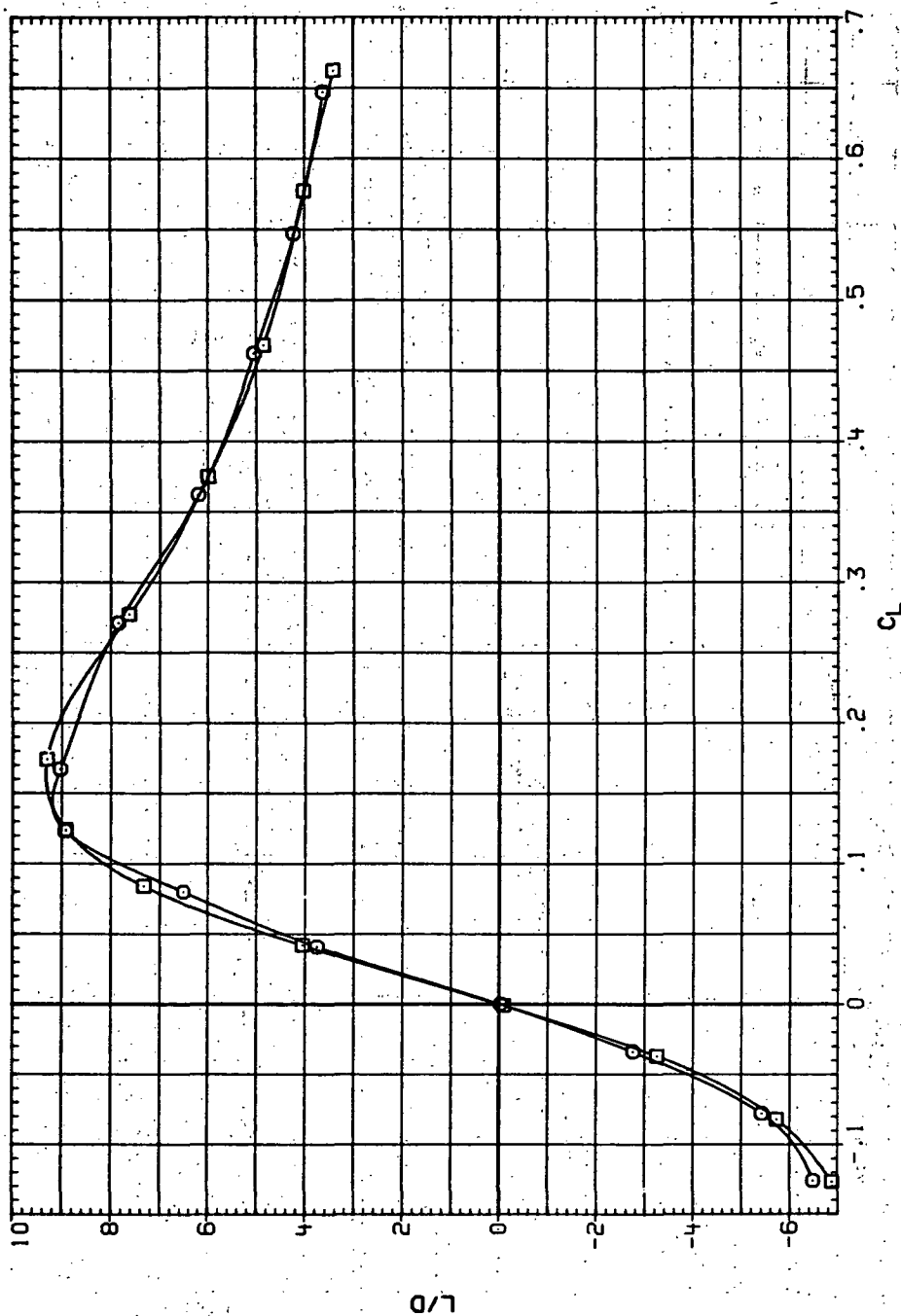


(c) C_m vs C_L

Figure 79.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 □ 74S08 (STEEL)
 RJR252 ○ 74S08 (STEEL)

RN/L Q(NSH)
 6.230 14.500
 6.200 19.200

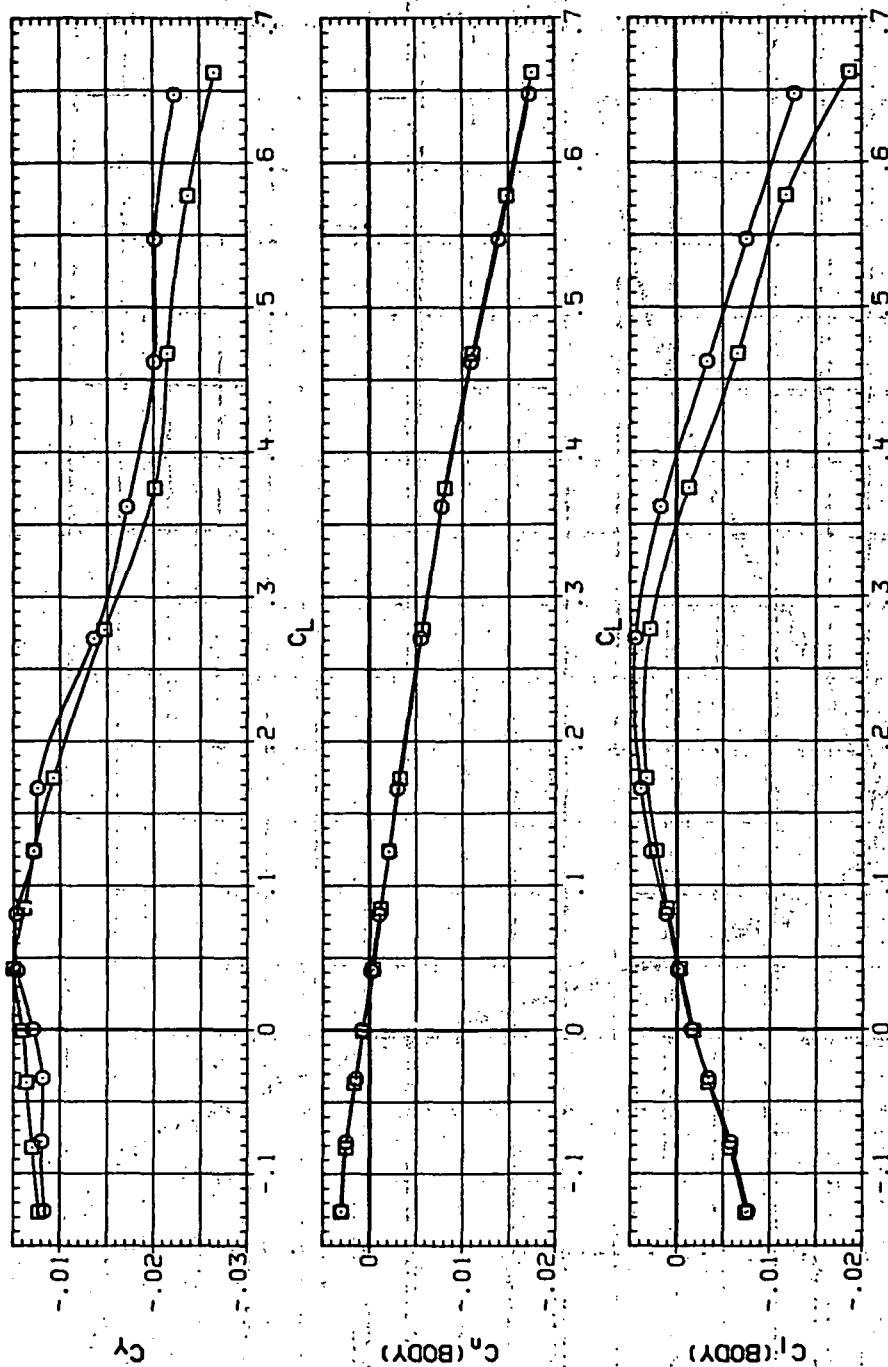


(d) L/D vs C_L .

Figure 79. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 74608 (STEEL)
 RJR252 74608 (STEEL)

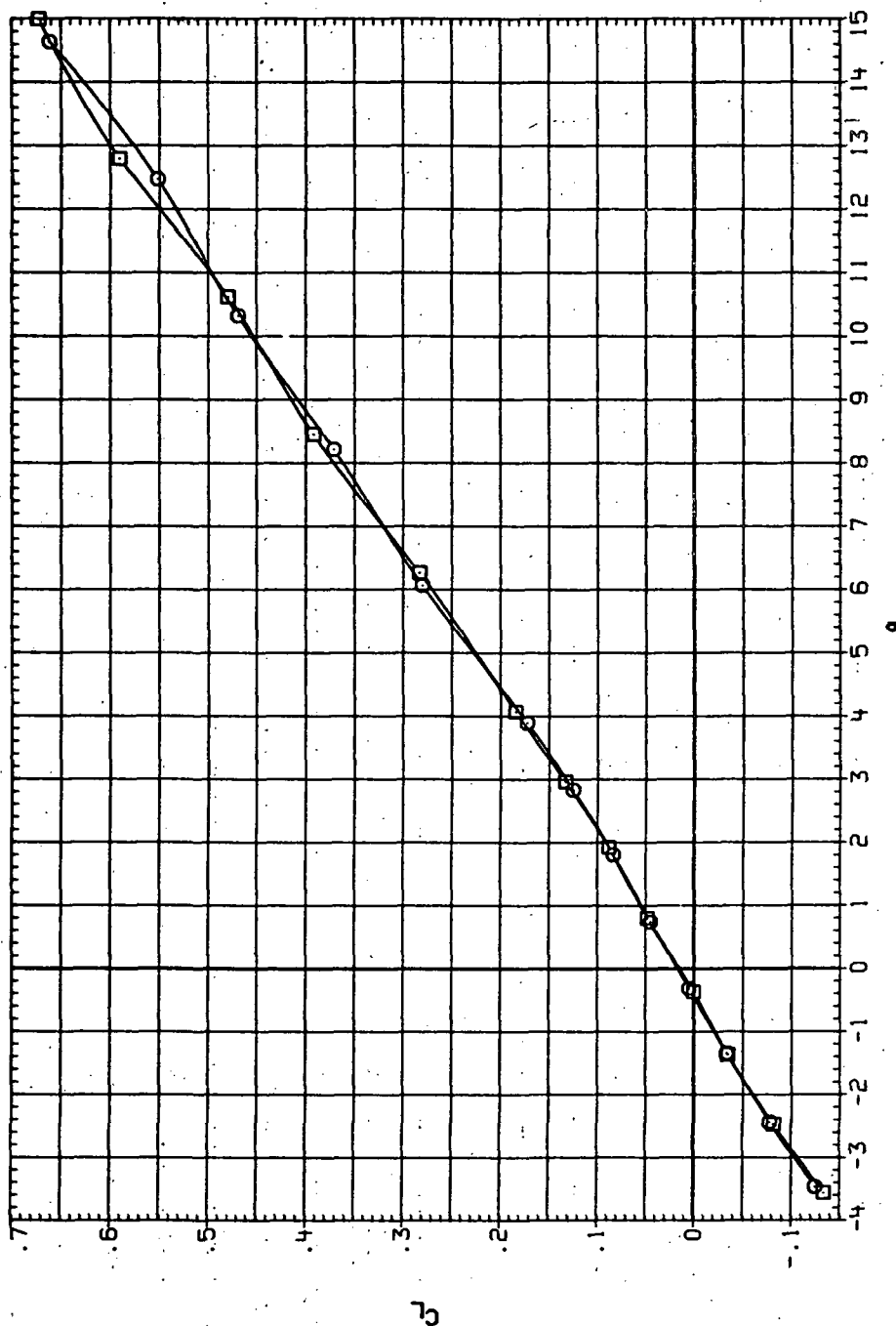
RN/L Q(NSH)
 8.230 14.500
 8.200 19.200



(e) C_Y , C_n and C_l vs C_L .

Figure 79.— Concluded.

DATA SET	SYMBOL	CONFIGURATION	RV/L	Q (NSH)
RJ207	○	74608 (STEEL)	8.230	15.000
RJ253	□	74608 (STEEL)	8.200	19.900

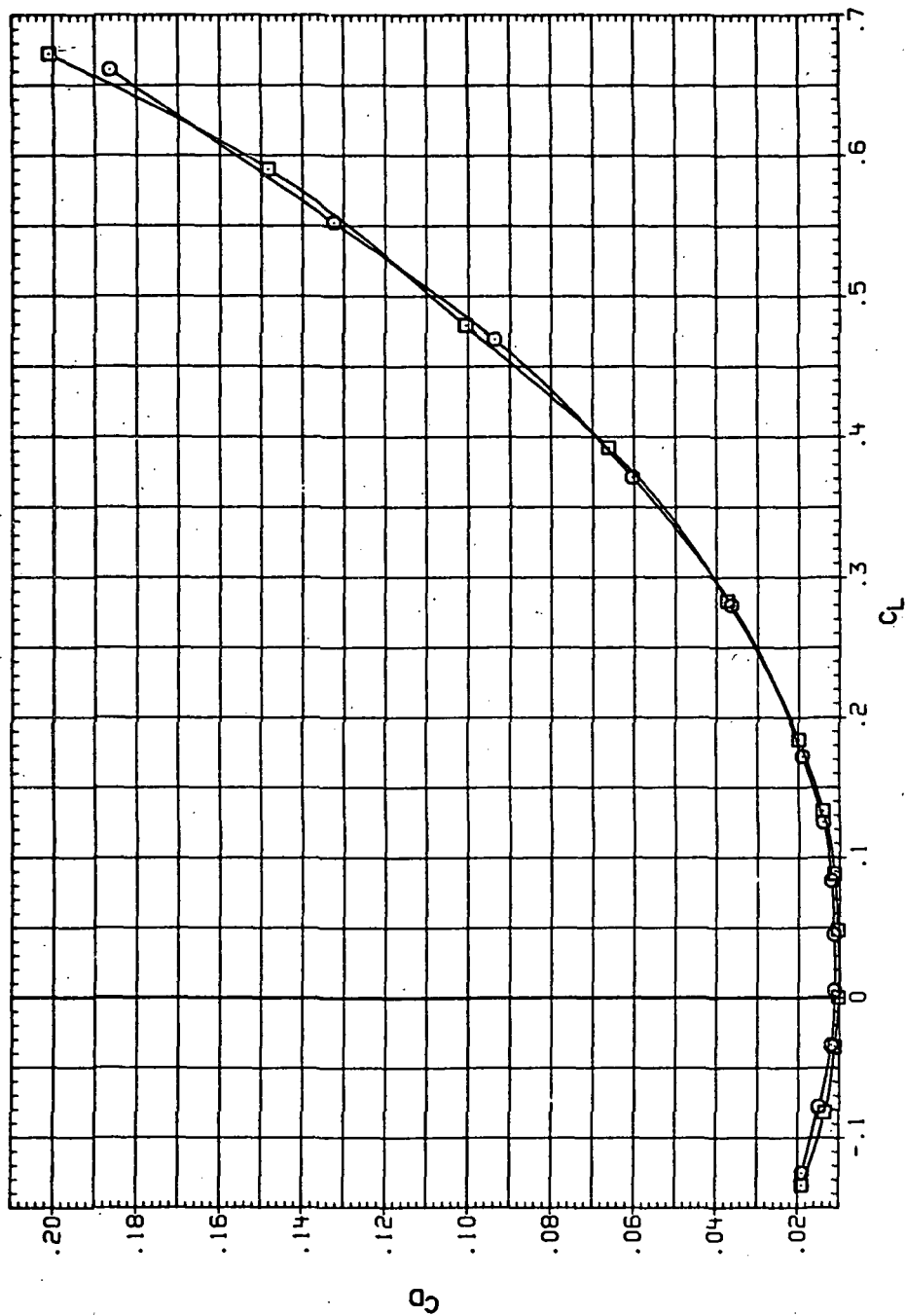


(a) C_L vs α .

Figure 80.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R0207  7460B (STEEL)
 R0253  7460B (STEEL)

RV/L Q(NSH)
 8.230 19.000
 8.200 19.900

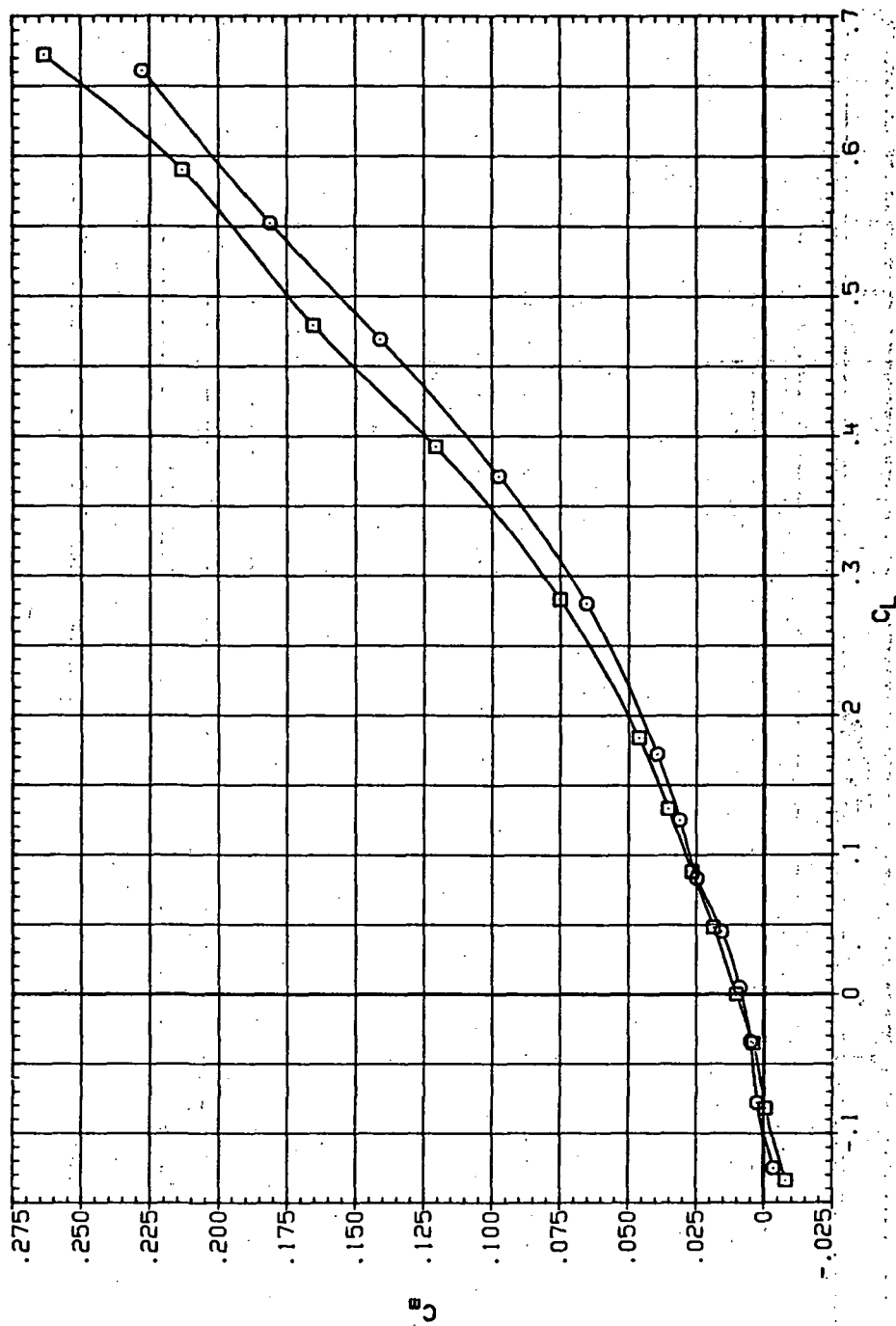


(b) C_D vs C_L .

Figure 80.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR207 $\circ$ 7460B (STEEL)
 RJR253 $\square$ 7460B (STEEL)

RV/L Q(NSH)
 6.230 15.000
 8.200 19.900

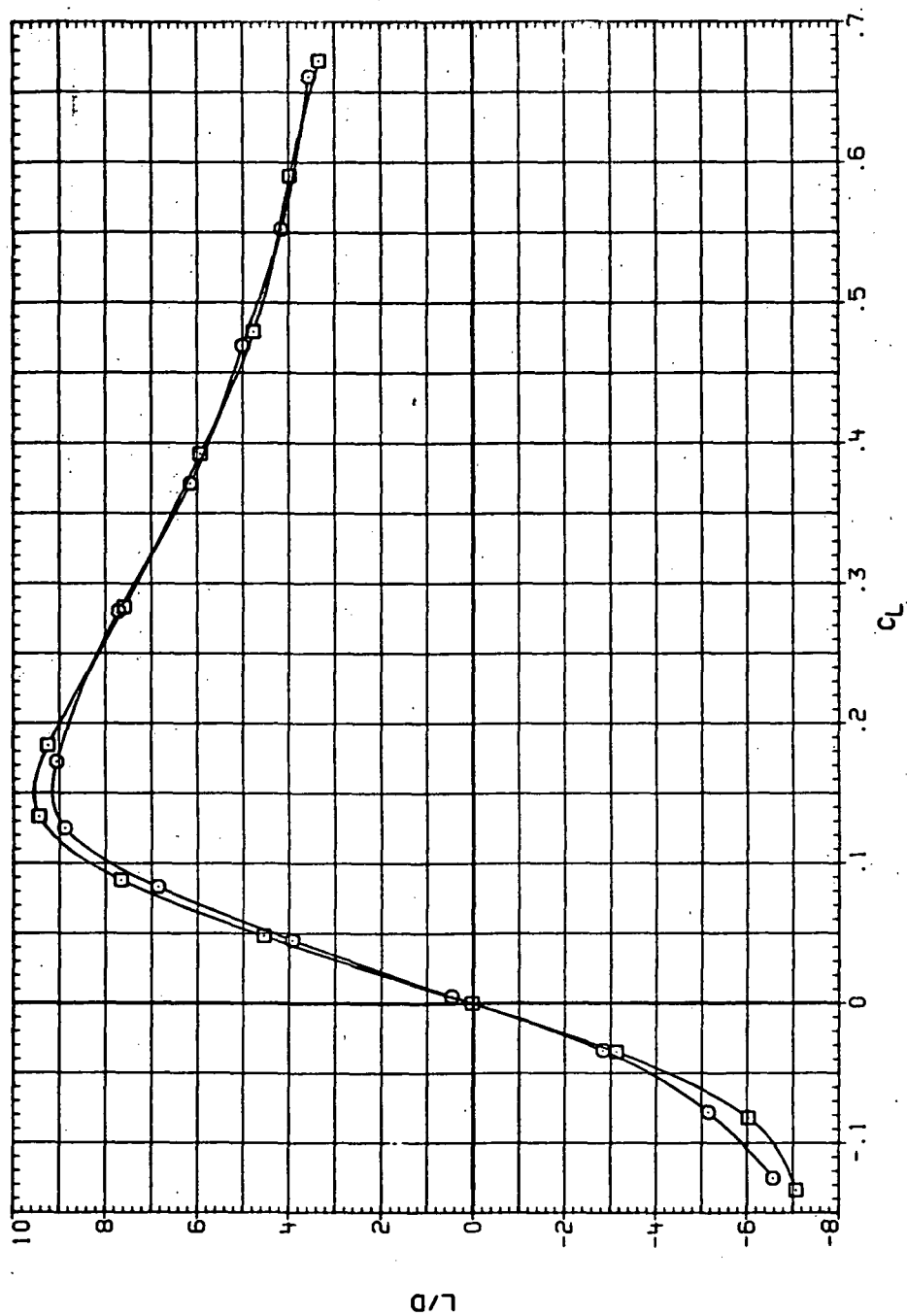


(c) C_m vs C_L

Figure 80. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR207 7460B (STEEL)
 RJR253 7460B (STEEL)

RN/L Q(NSH)
 6.230 15.000
 8.200 19.900

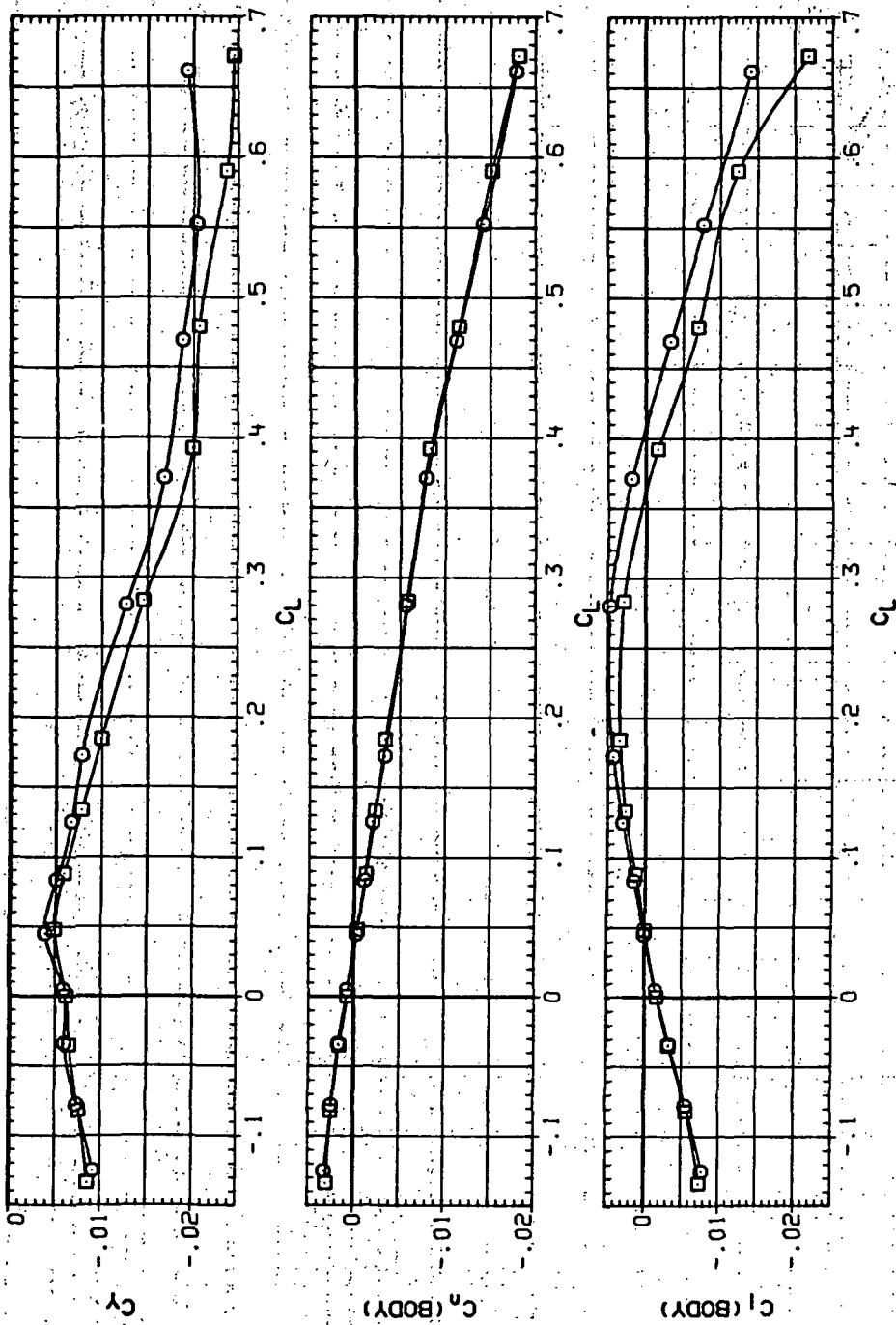


(d) L/D vs C_L .

Figure 80.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR207 74508 (STEEL)
 RJR253 74508 (STEEL)

RN/L QINSH1
 6.230 15.000
 8.200 19.900

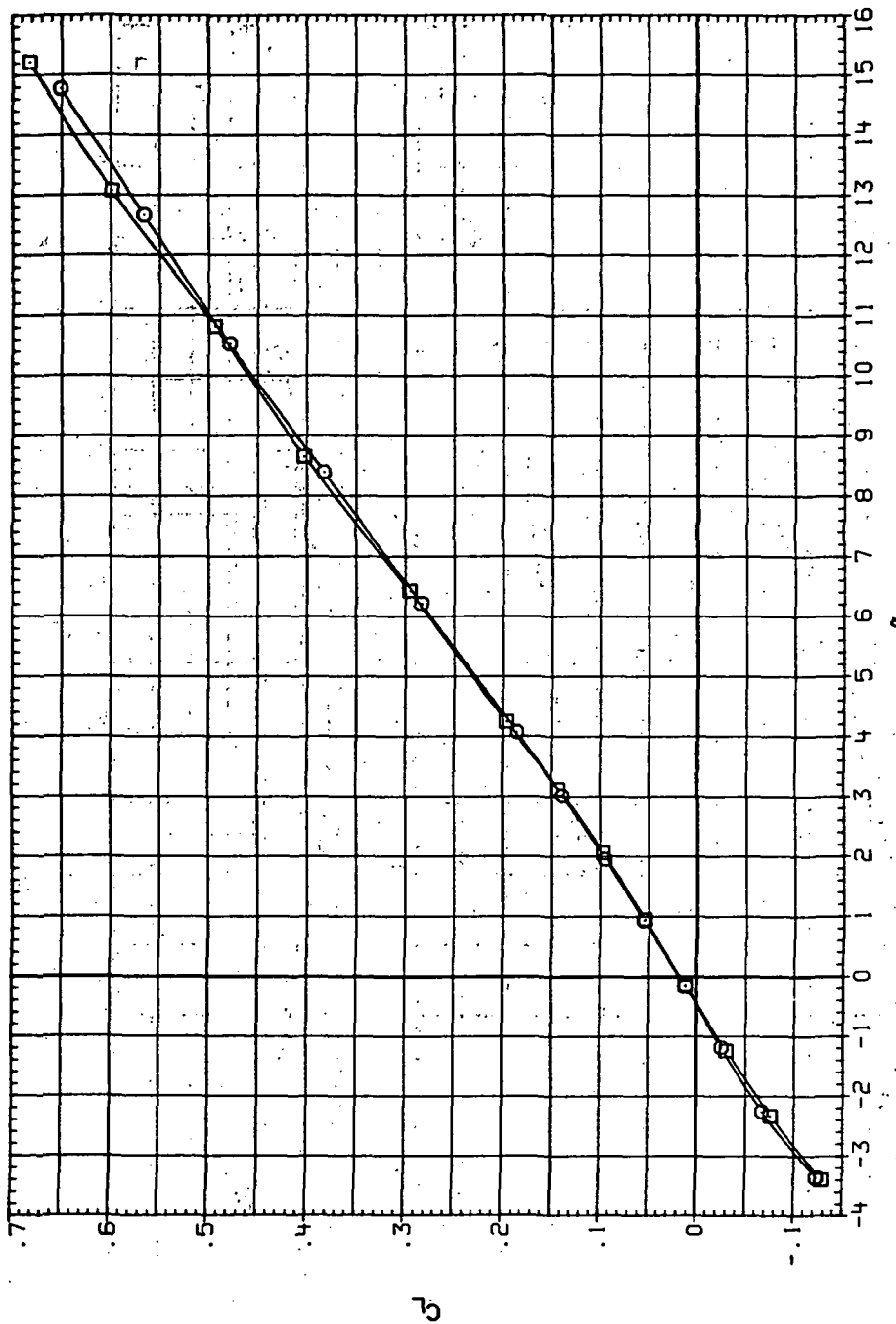


(e) C_Y , C_n and C_l vs C_L .

Figure 80. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR208 7460B (STEEL)
 RJR254 7460B (STEEL)

RM/L Q1NSH
 6.230 18.400
 6.200 21.200

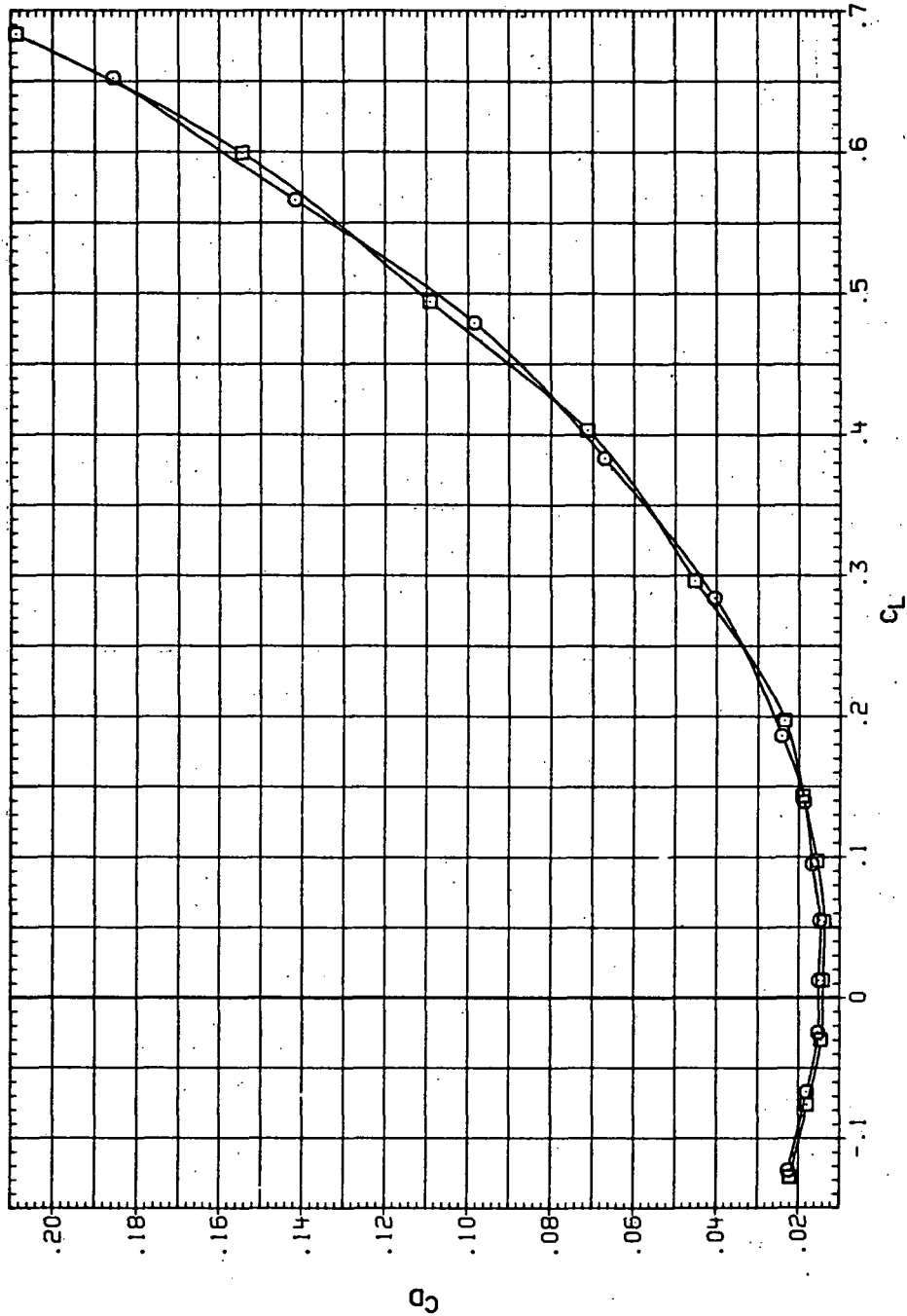


(a) C_L vs α .

Figure 81.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.1$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR208 $\square$ 7460B (STEEL)
 RJR254 $\circ$ 7460B (STEEL)

RV/L Q (NSH)
 6.230 16.400
 8.200 21.200

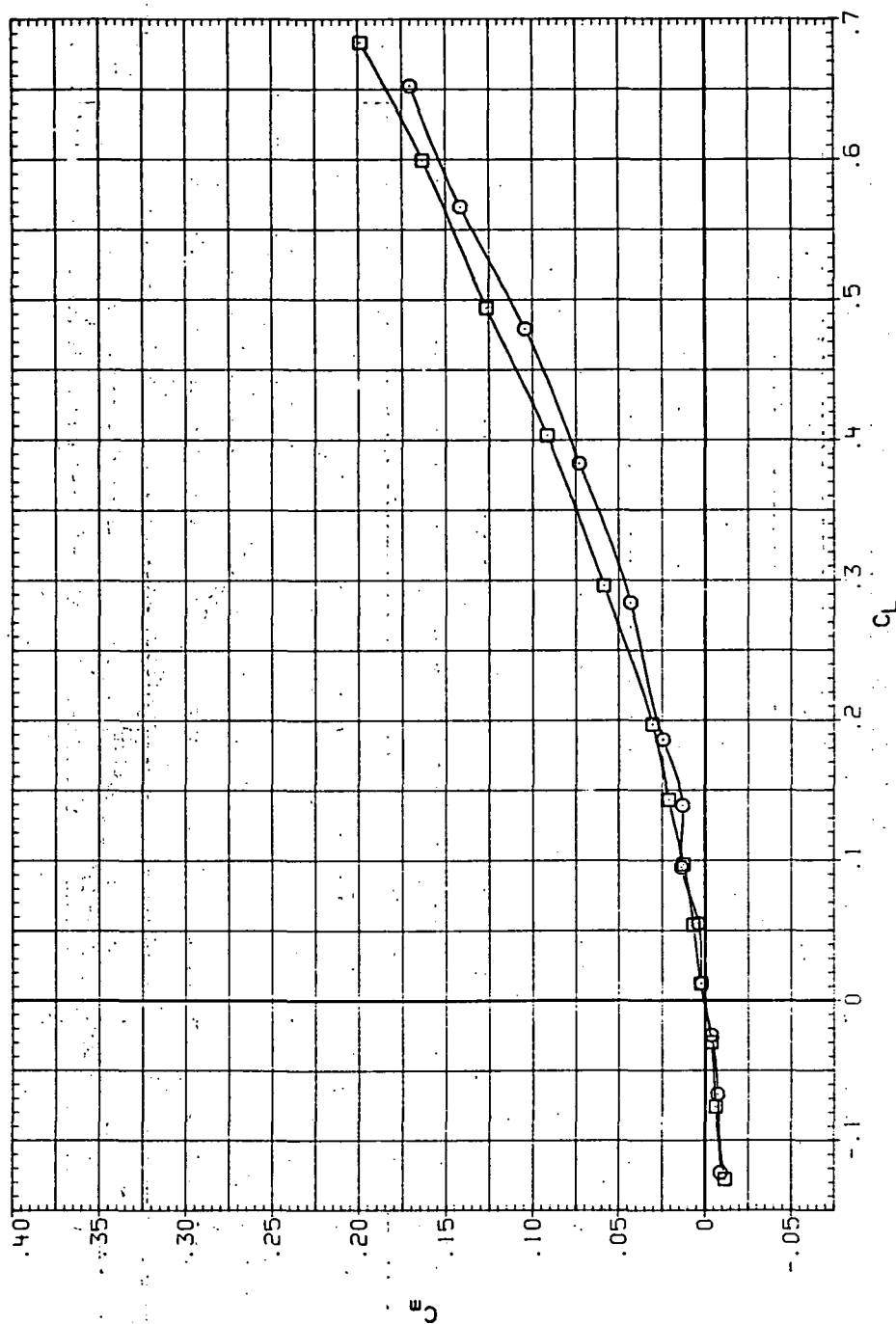


(b) C_D vs C_L .

Figure 81.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 $\square$ 74508 (STEEL)
 RJR294 $\circ$ 74508 (STEEL)

RN/L Q(NSM)
 6.230 16.400
 8.200 21.200

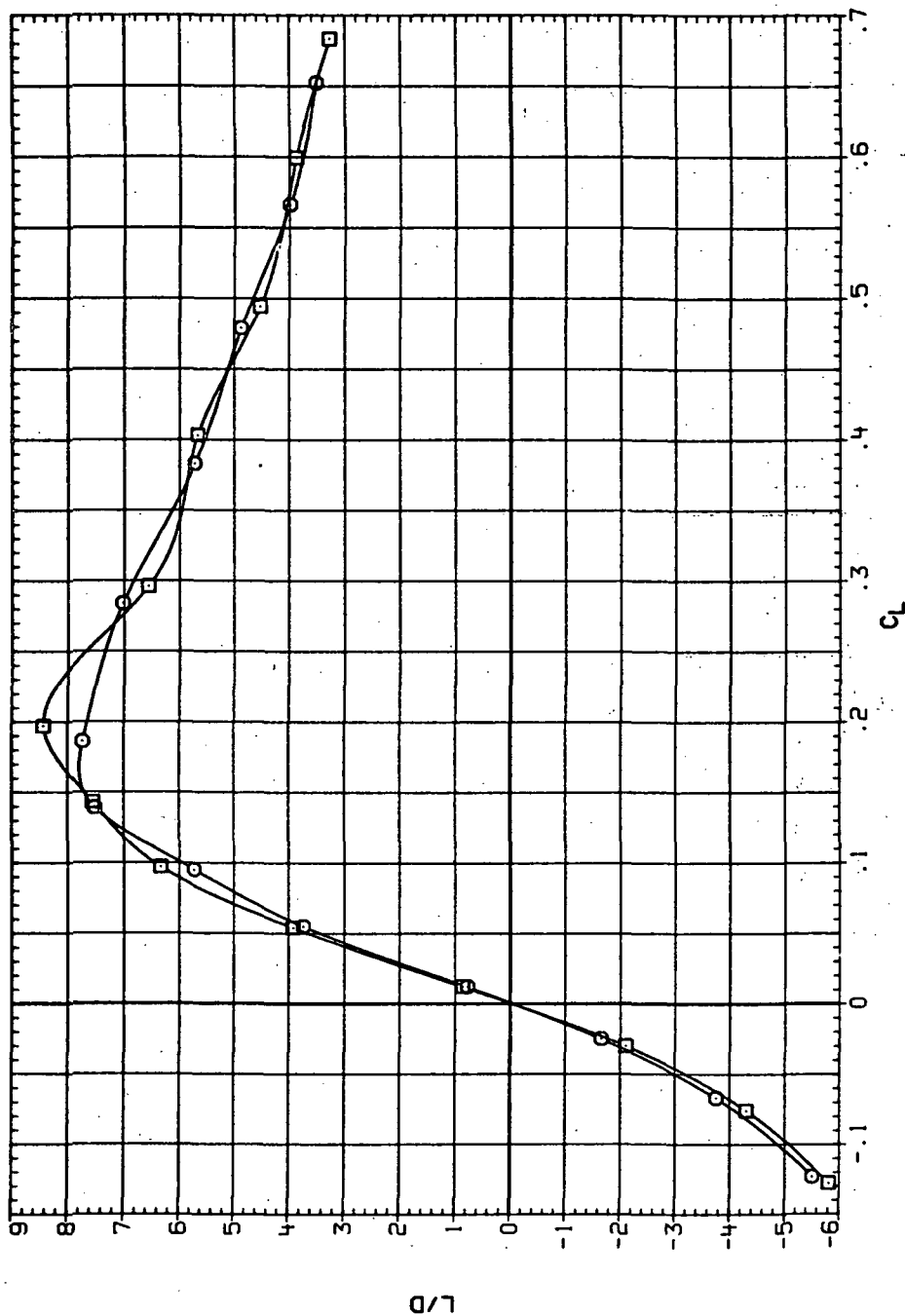


(c) C_m vs C_L .

Figure 81.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 ○ 74608 (STEEL)
 RJR254 □ 74608 (STEEL)

RN/L Q(NSH)
 6.230 18.400
 8.200 21.200

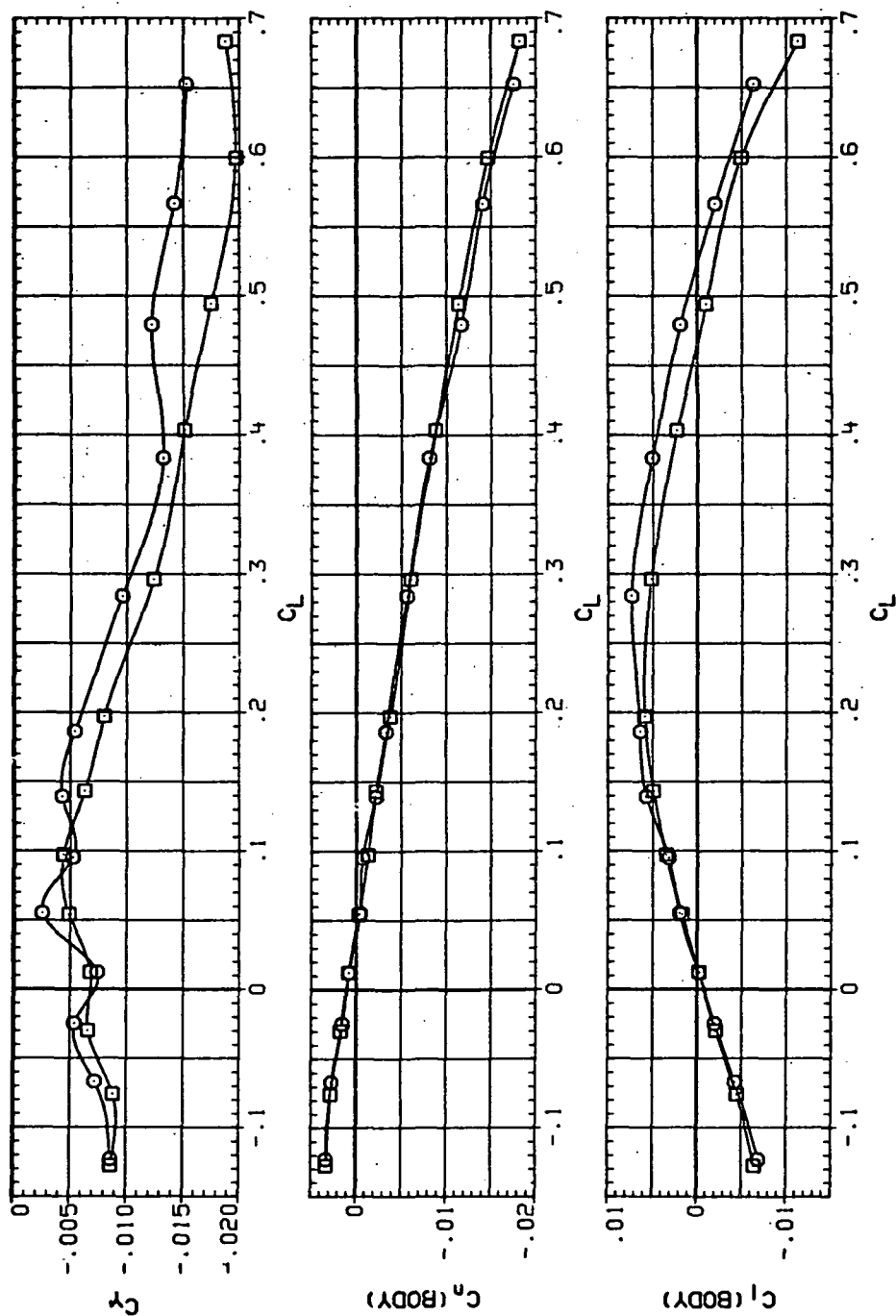


(d) L/D vs C_L .

Figure 81.— Continued.

DATA SET SYMBOL CONFIGURATION
 R4R208 74508 (STEEL)
 R4R254 74508 (STEEL)

RN/L Q(NSH)
 6.230 18.400
 8.200 21.200

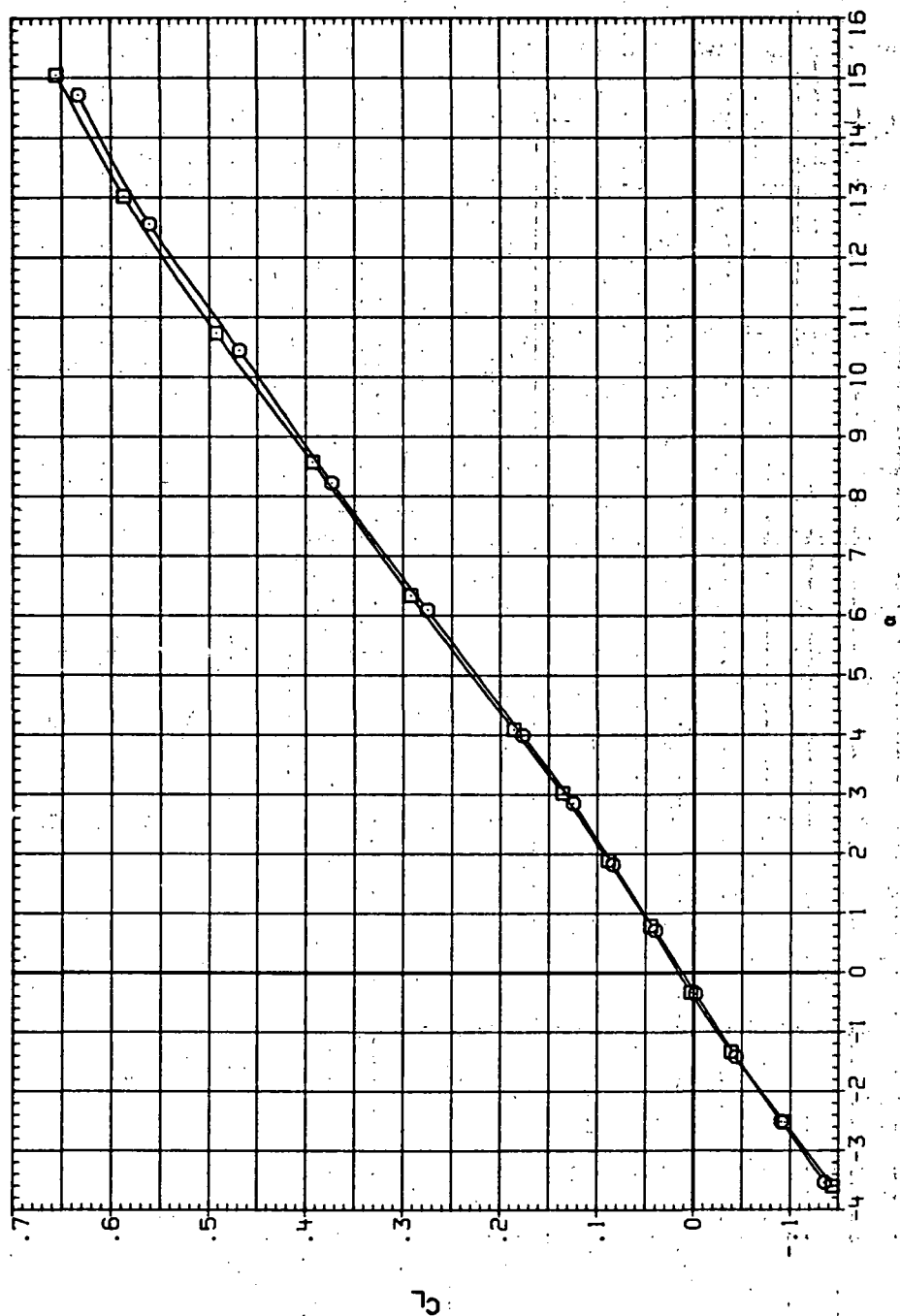


(e) C_Y , C_n and C_l vs C_L .

Figure 81.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJA209 $\square$ 74S08 (STEEL)
 RJA255 $\circ$ 74S08 (STEEL)

RM/L Q (INCH)
 8.230 17.000
 8.200 22.800

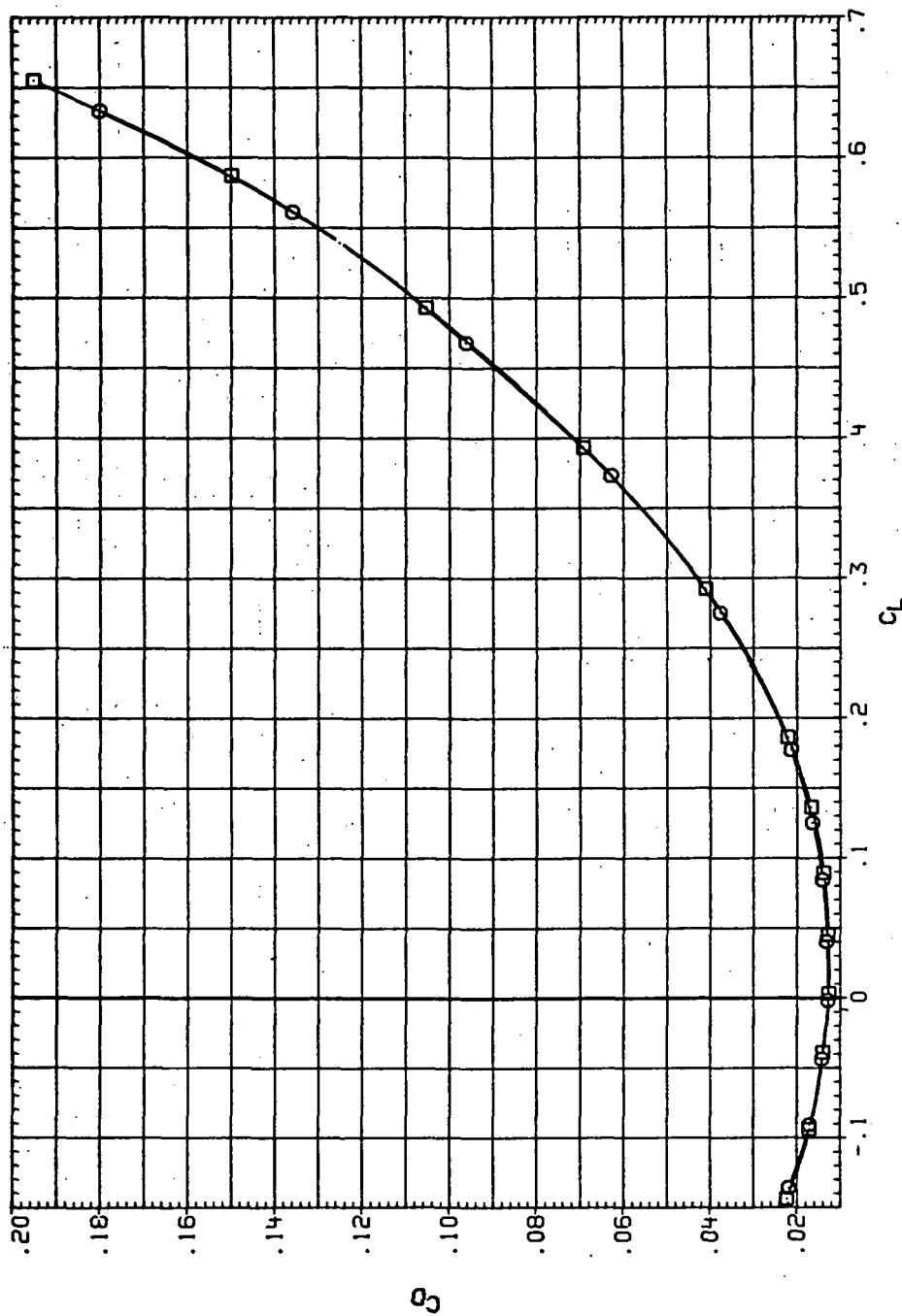


(a) C_L vs α .

Figure 82.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.2$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUP209 $\square$ 7M508 (STEEL)
 RUP255 $\square$ 7M508 (STEEL)

RV/L Q (NSW)
 8.230 17.000
 8.200 22.800

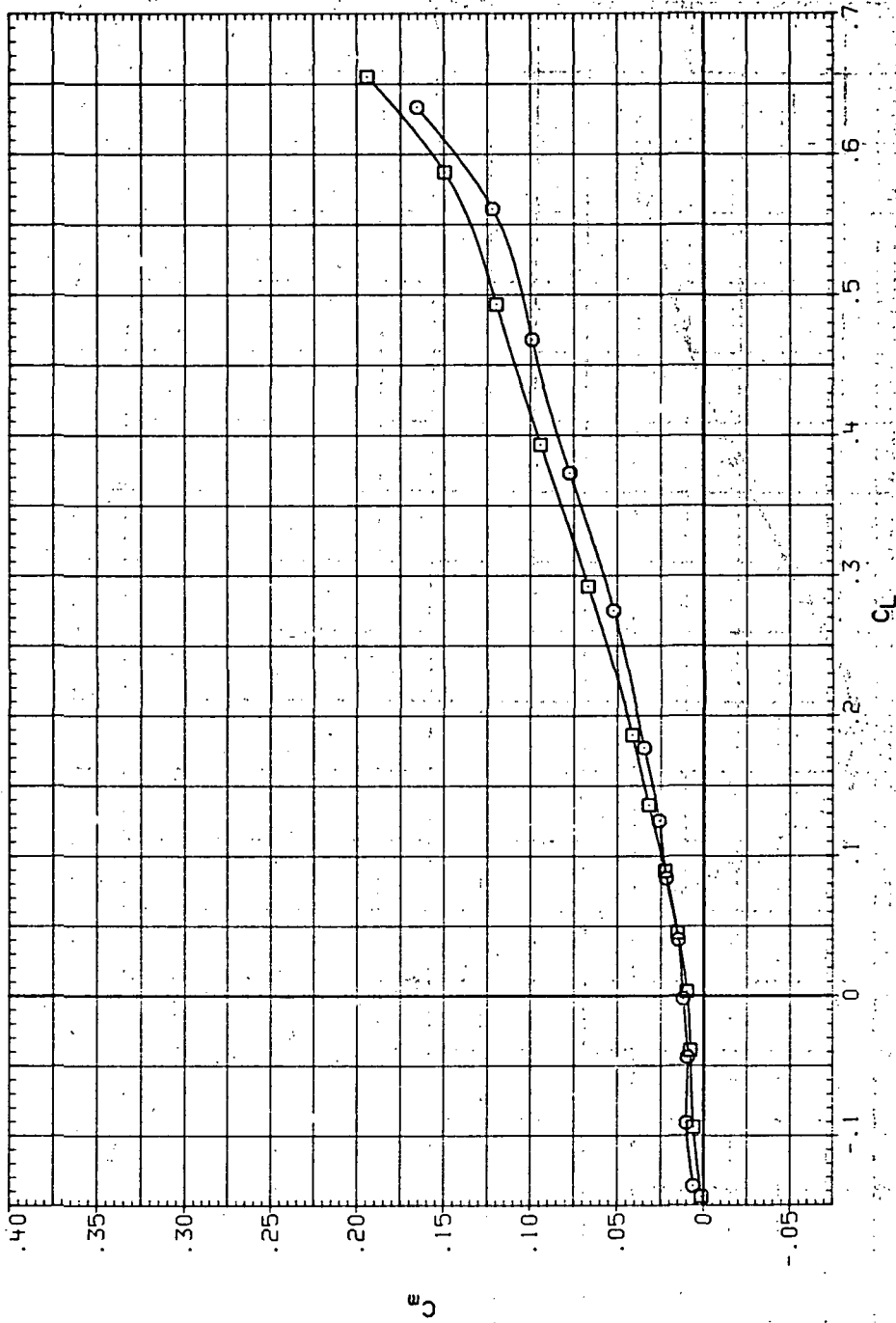


(b) C_D vs C_L .

Figure 82. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR209 $\square$ 7460B (STEEL)
 RJR255 $\circ$ 7460B (STEEL)

RV/L 0 (NSH)
 6.230 17.000
 8.200 22.800

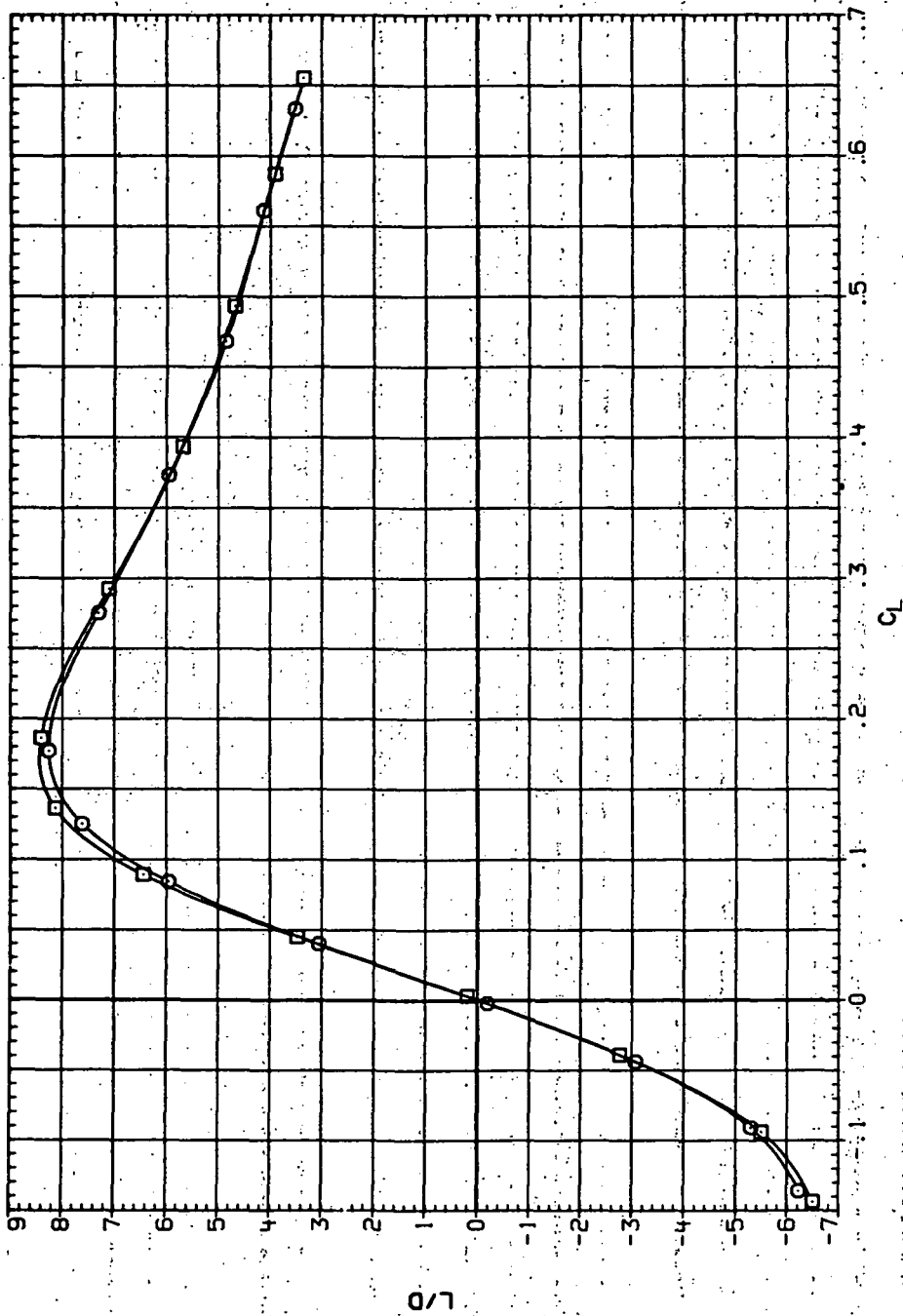


(c) C_m vs C_L

Figure 82.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR208 74608 (STEEL)
 RJR205 74608 (STEEL)

RN/L Q (INCH)
 6.230 17.000
 8.200 22.800

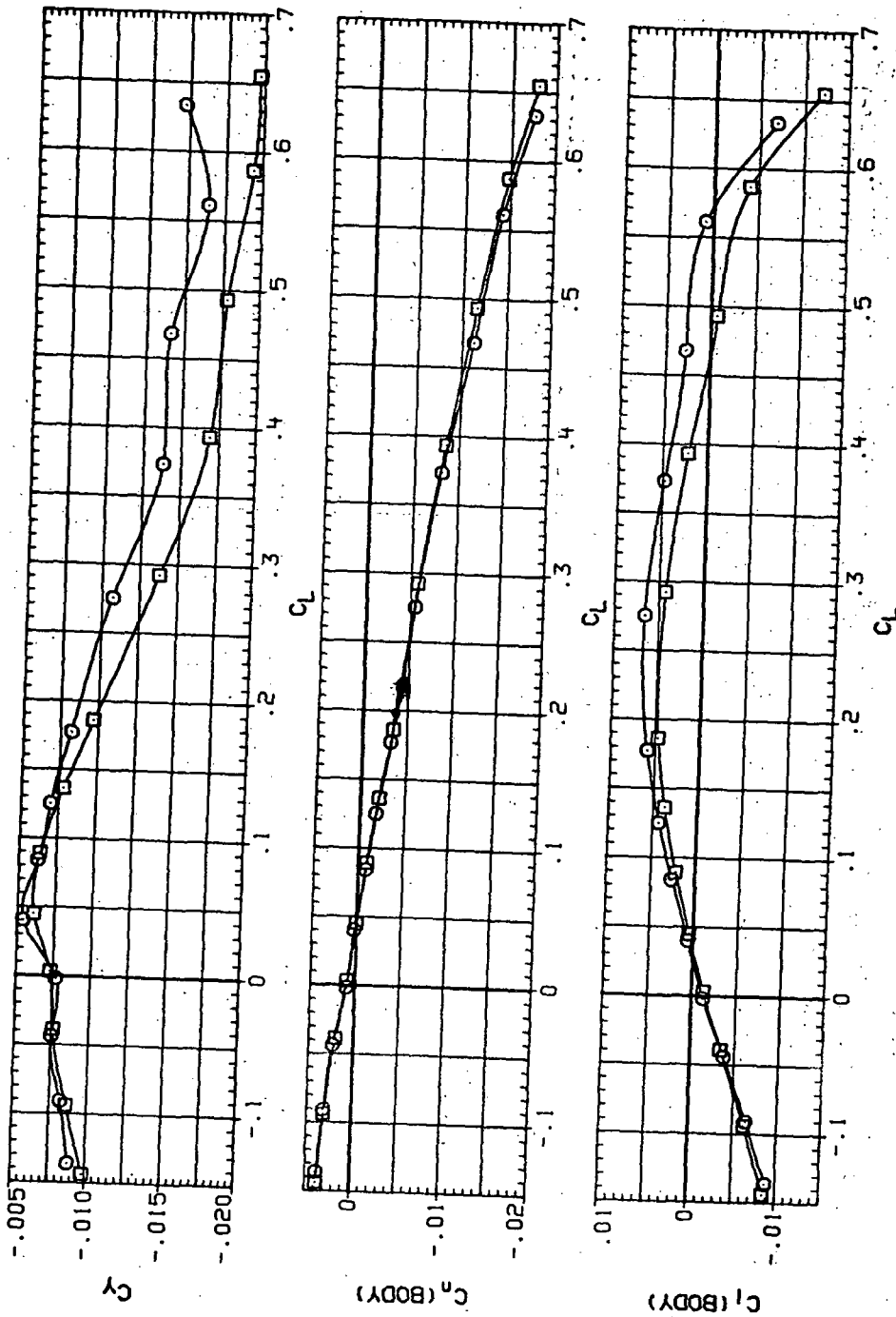


(d) L/D vs C_L .

Figure 82.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR209 74508 (STEEL)
 RJR255 74508 (STEEL)

RV/L Q(NSH)
 6.230 17.000
 8.200 22.800

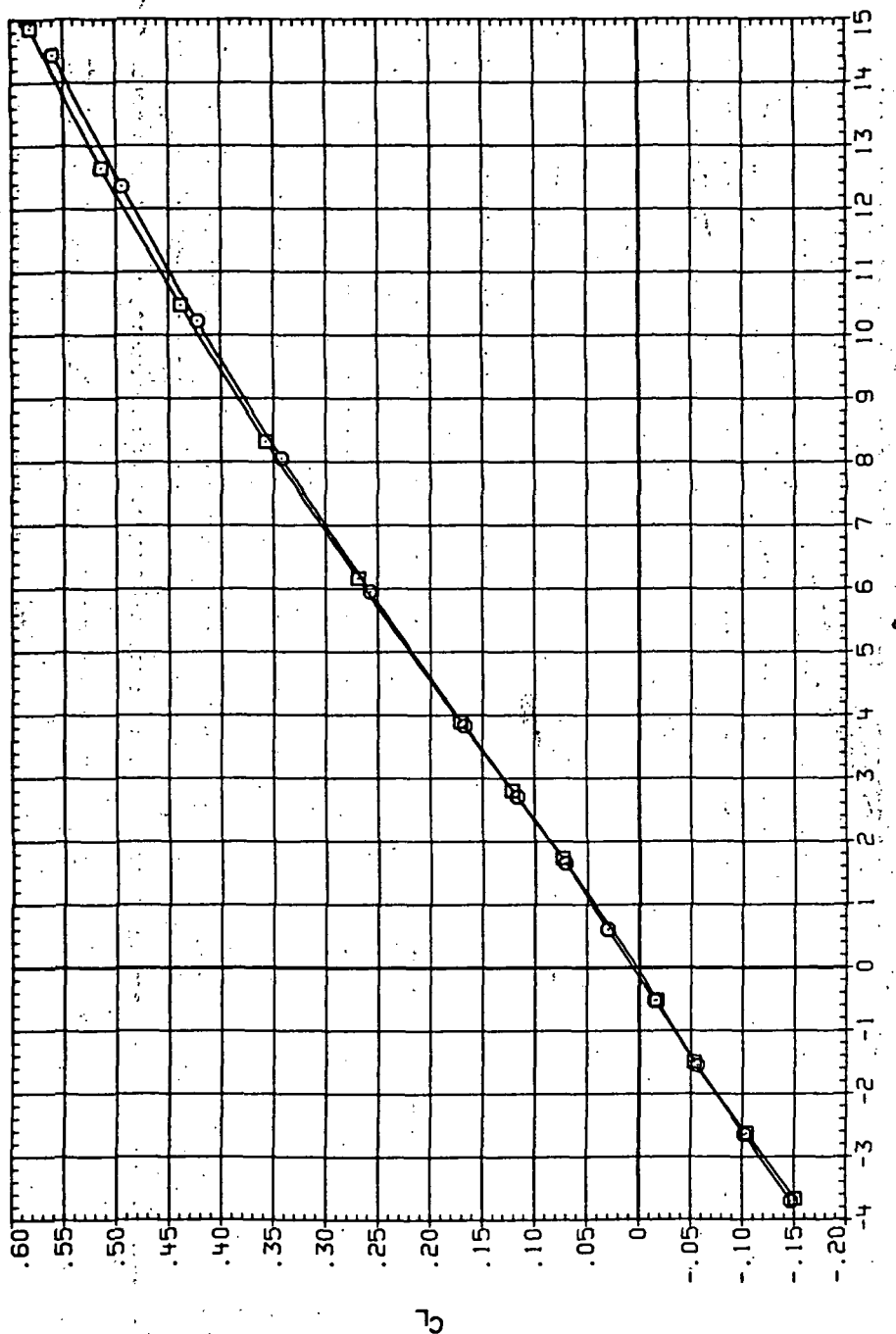


(e) C_Y , C_n and C_l vs C_L .

Figure 82. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR210 74608 (STEEL)
 RJR256 74608 (STEEL)

RM/L Q(INS)
 8.230 18.600
 8.200 24.400

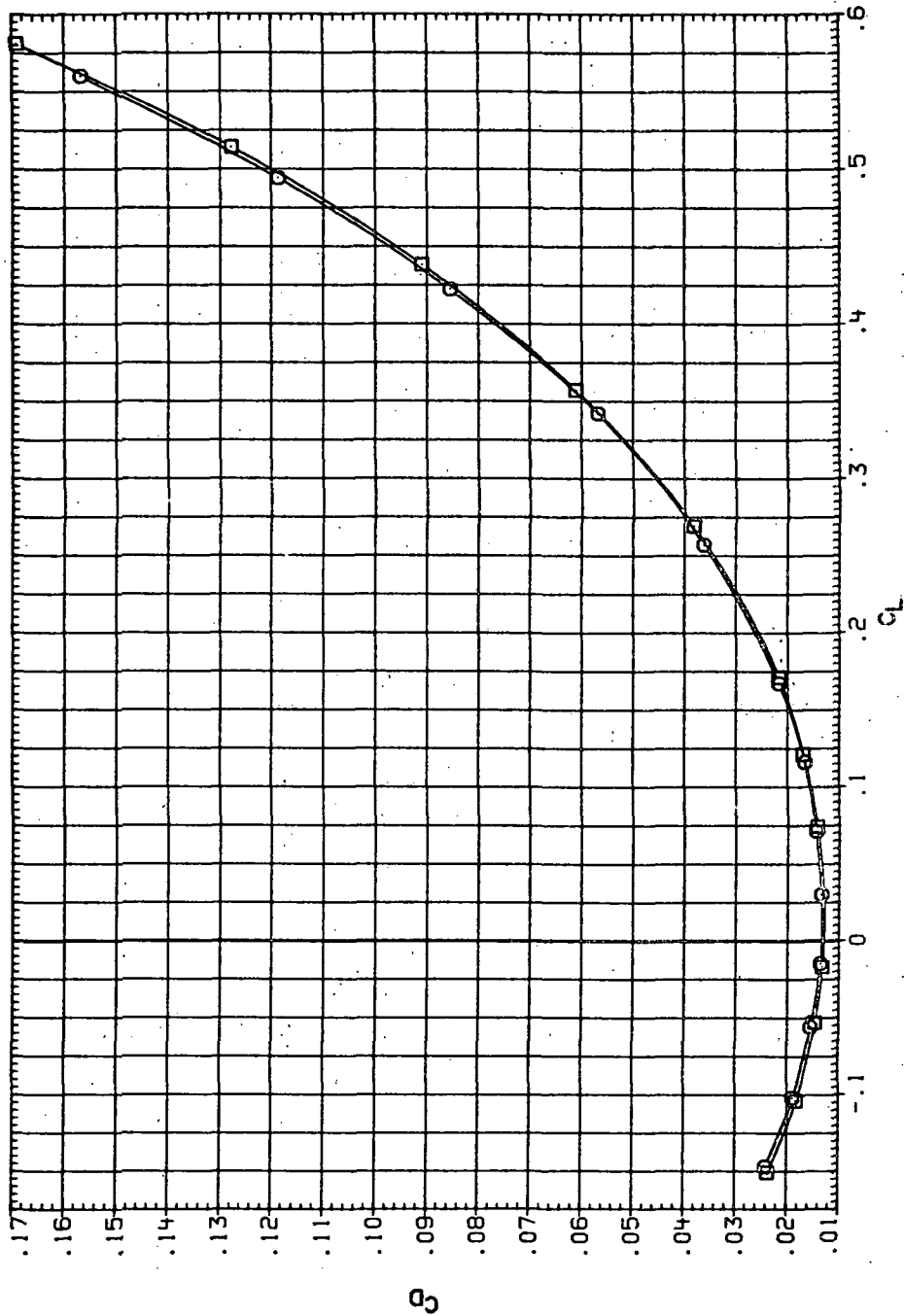


(a) C_L vs α .

Figure 83.-- Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 1.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR210 7450B (STEEL)
 RJR236 7450B (STEEL)

RV/L 0 (NSM)
 6.230 18.600
 8.200 24.400

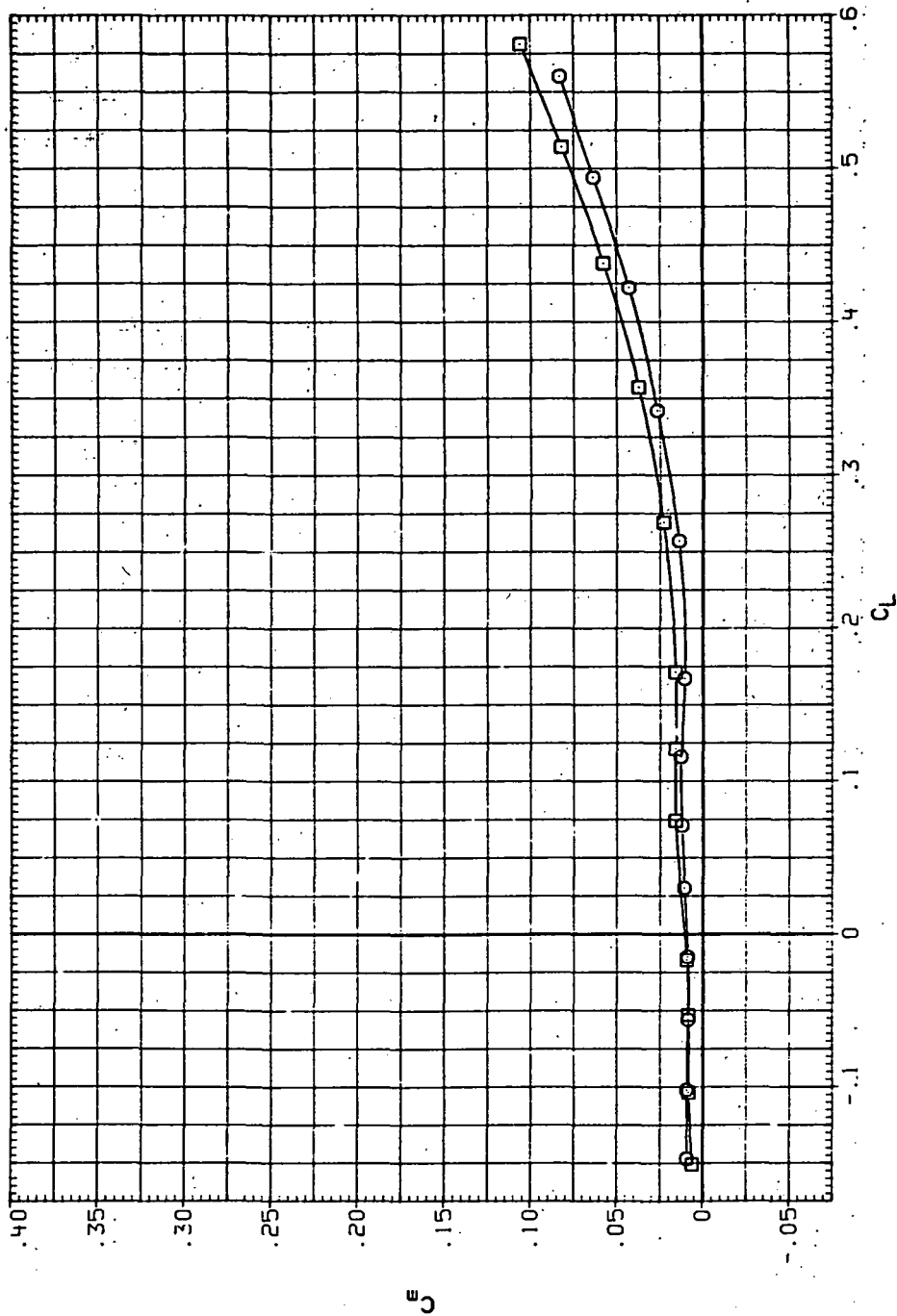


(b) C_D vs C_L .

Figure 83.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR210 ○ 7H608 (STEEL)
 RJR256 □ 7H608 (STEEL)

RN/L Q (NSH)
 6,230 18,600
 8,200 24,400

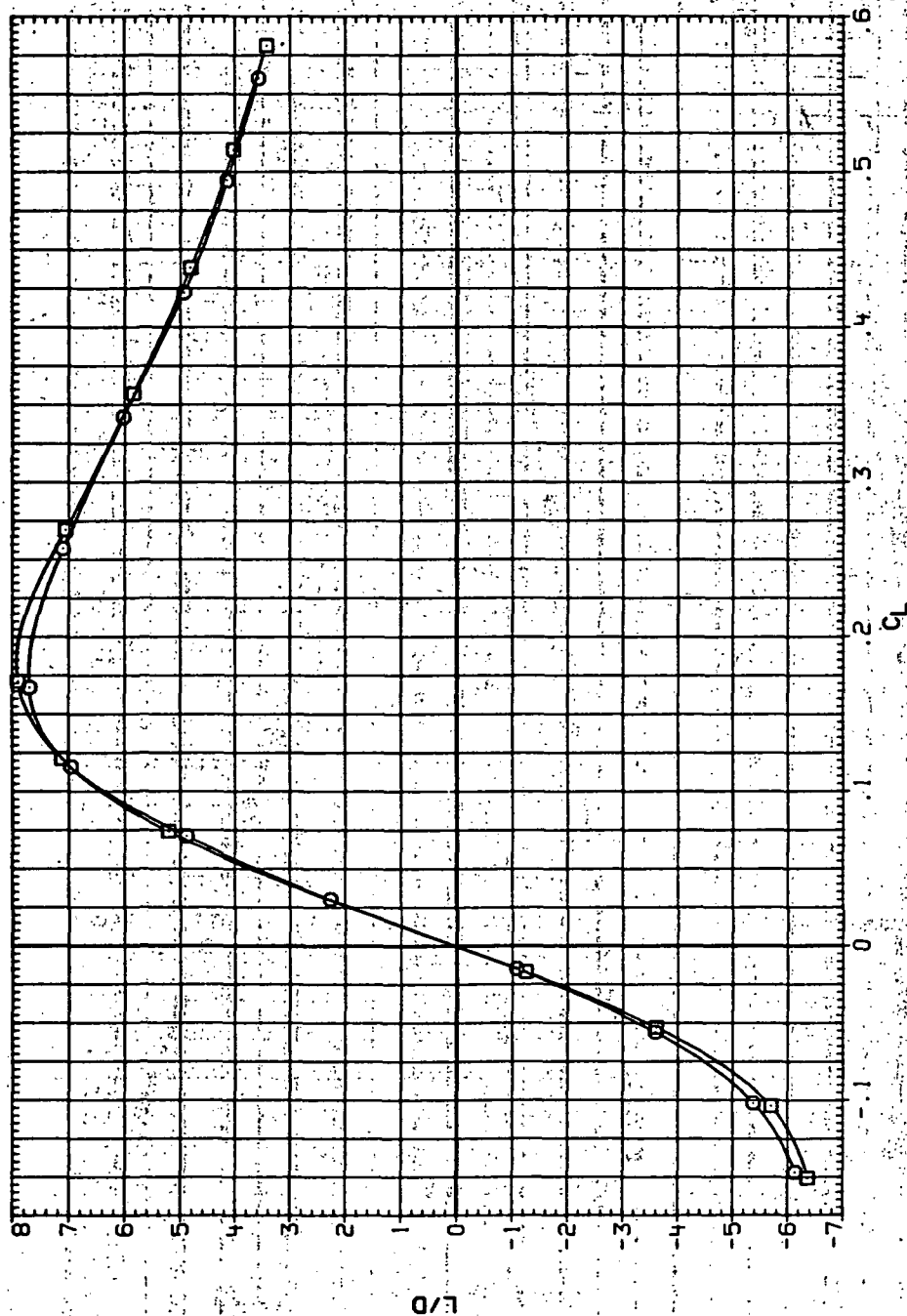


(c) C_m vs C_L

Figure 83.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR210 $\square$ 74609 (STEEL)
 RJR256 $\square$ 74609 (STEEL)

RM/L Q(NSM)
 8.230 18 600
 8.200 24 400

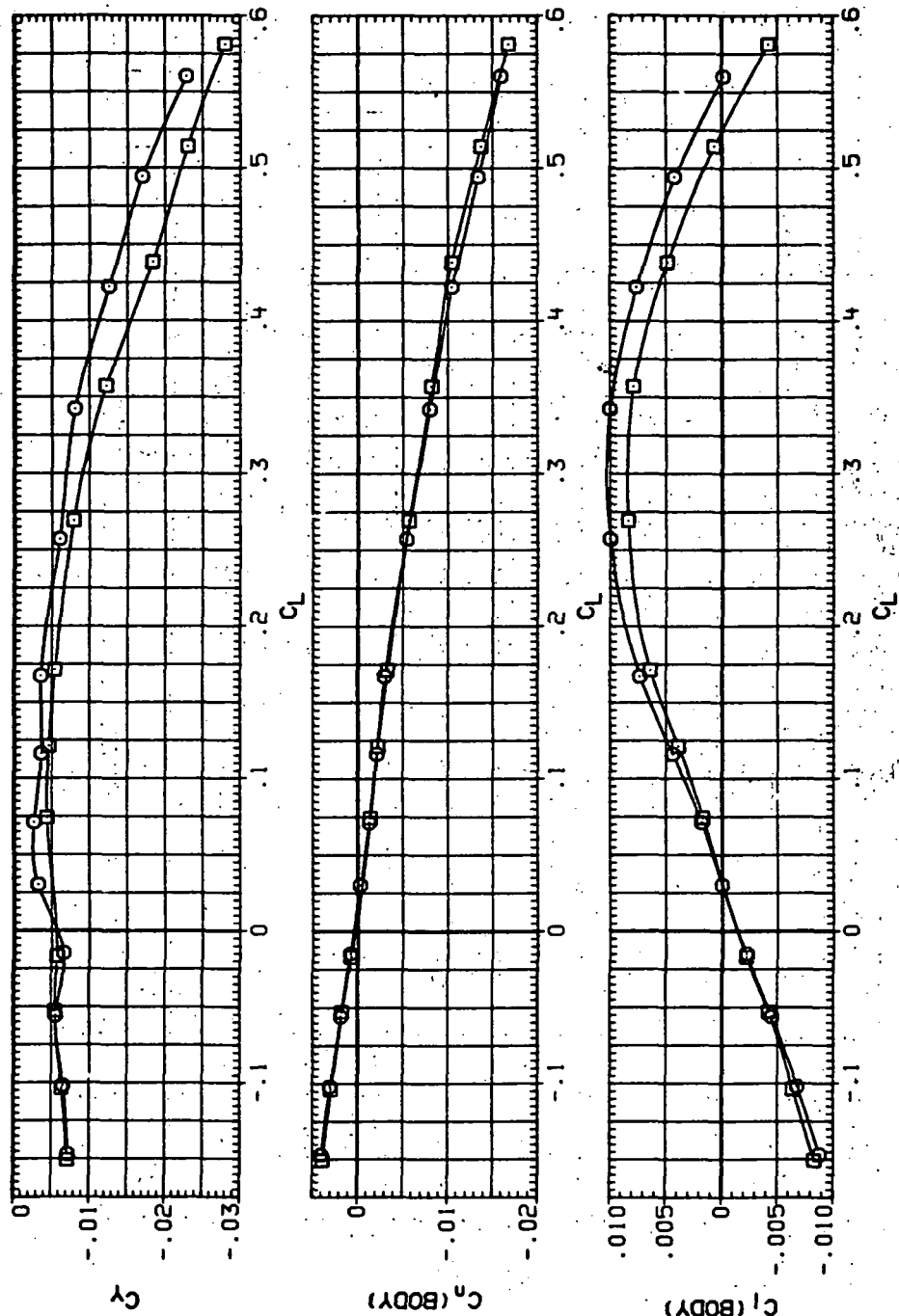


(d) L/D vs C_L .

Figure 83. — Continued.

DATA SET SYMBOL CONFIGURATION
 R/R210 74508 (STEEL)
 R/R256 74508 (STEEL)

R/V/L 0 (NCH)
 6.230 18.600
 8.200 24.400

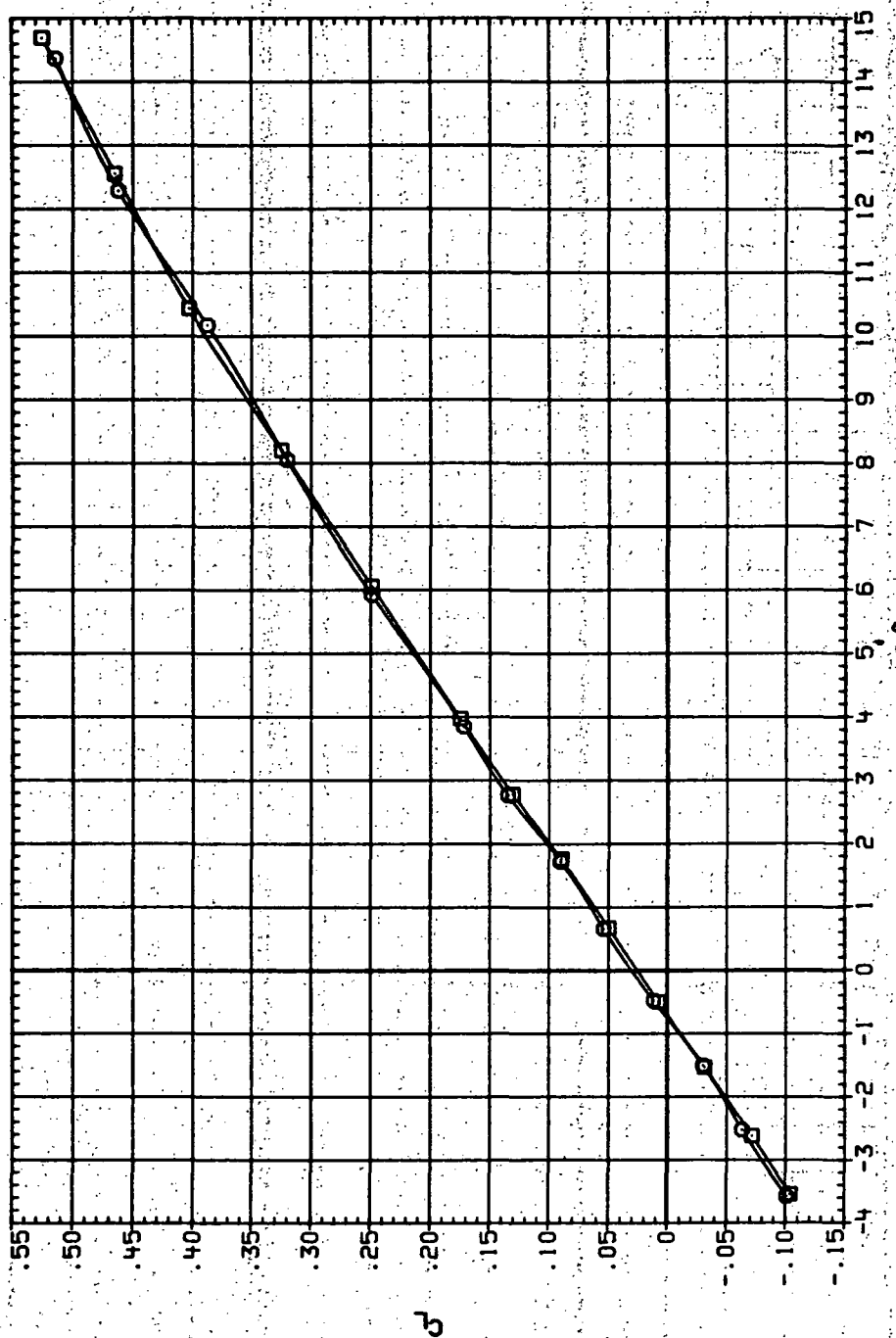


(e) C_Y , C_n and C_l vs C_L .

Figure 83. - Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR211 74508 (STEEL)
 RJR257 74508 (STEEL)

RM/L Q (INSH)
 6.230 18.500
 8.200 24.700

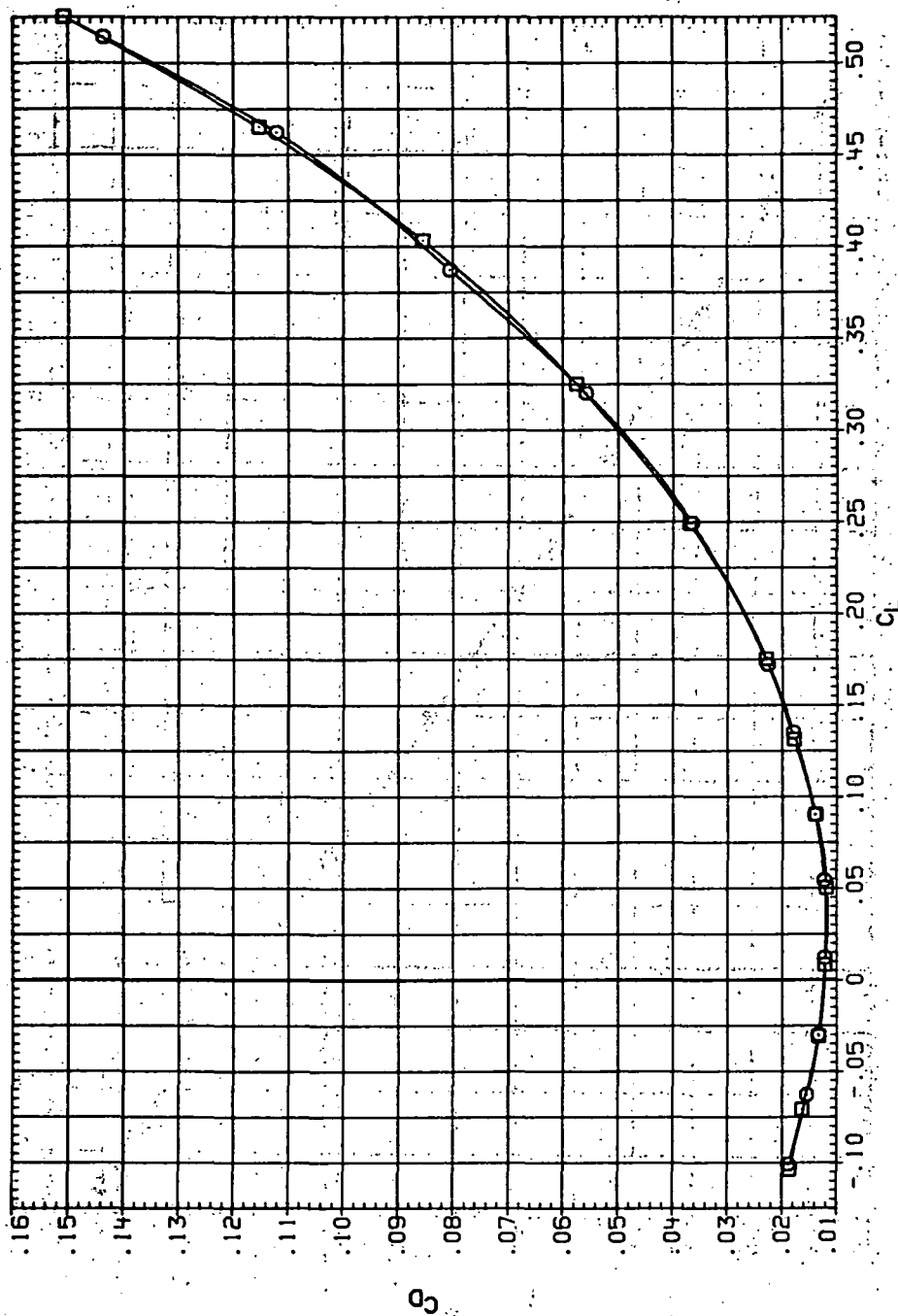


(a) C_L vs α .

Figure 84. — Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 60^\circ$, $M = 2.0$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR211 O 74608 (STEEL)
 RJR257 □ 74608 (STEEL)

RM/L Q(NSH)
 6.230 18,500
 8.200 24,700

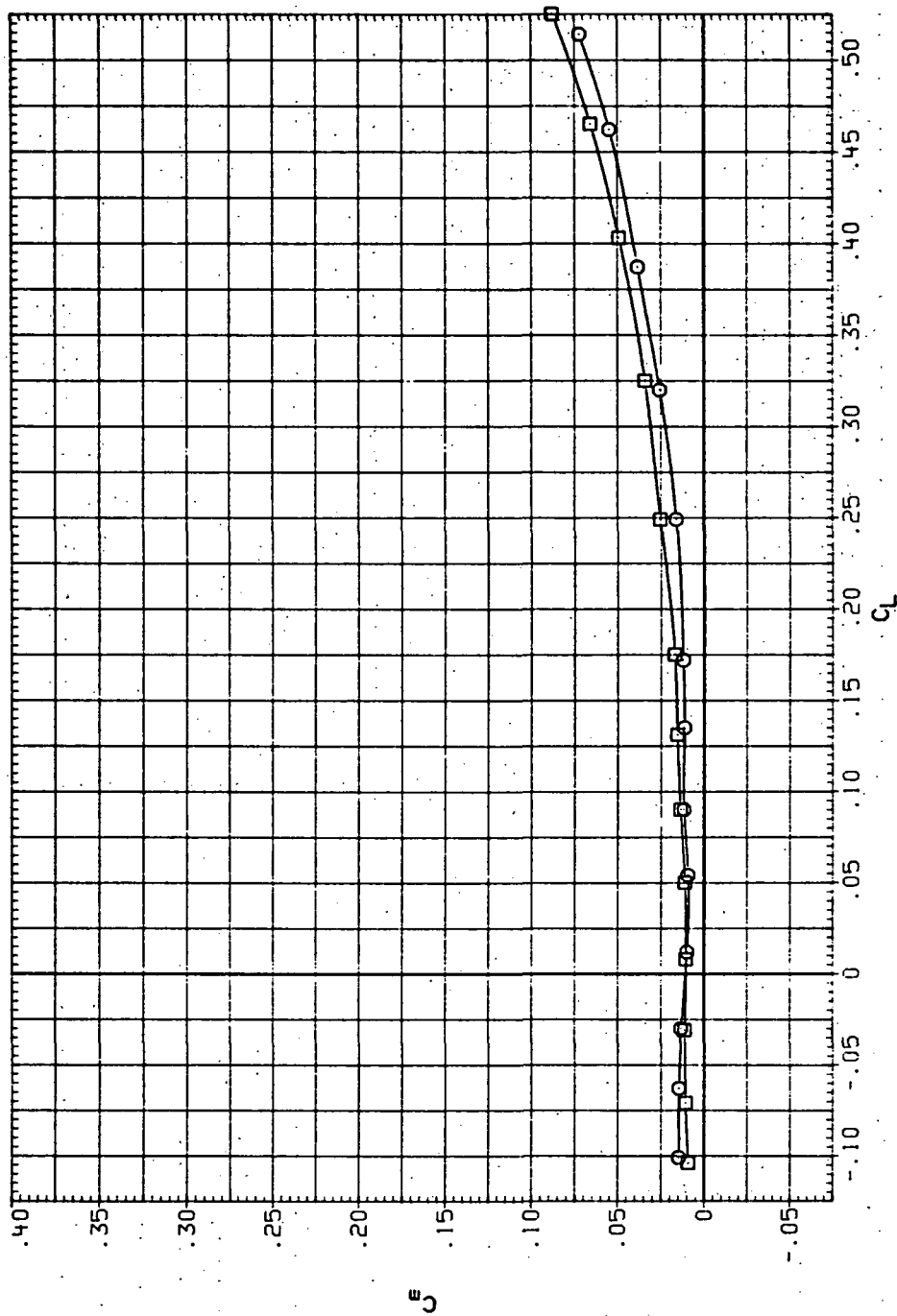


(b) C_D vs C_L .

Figure 84.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR211 74608 (STEEL)
 RJR257 74608 (STEEL)

RN/L Q(NSM)
 6.230 18.500
 8.200 24.700

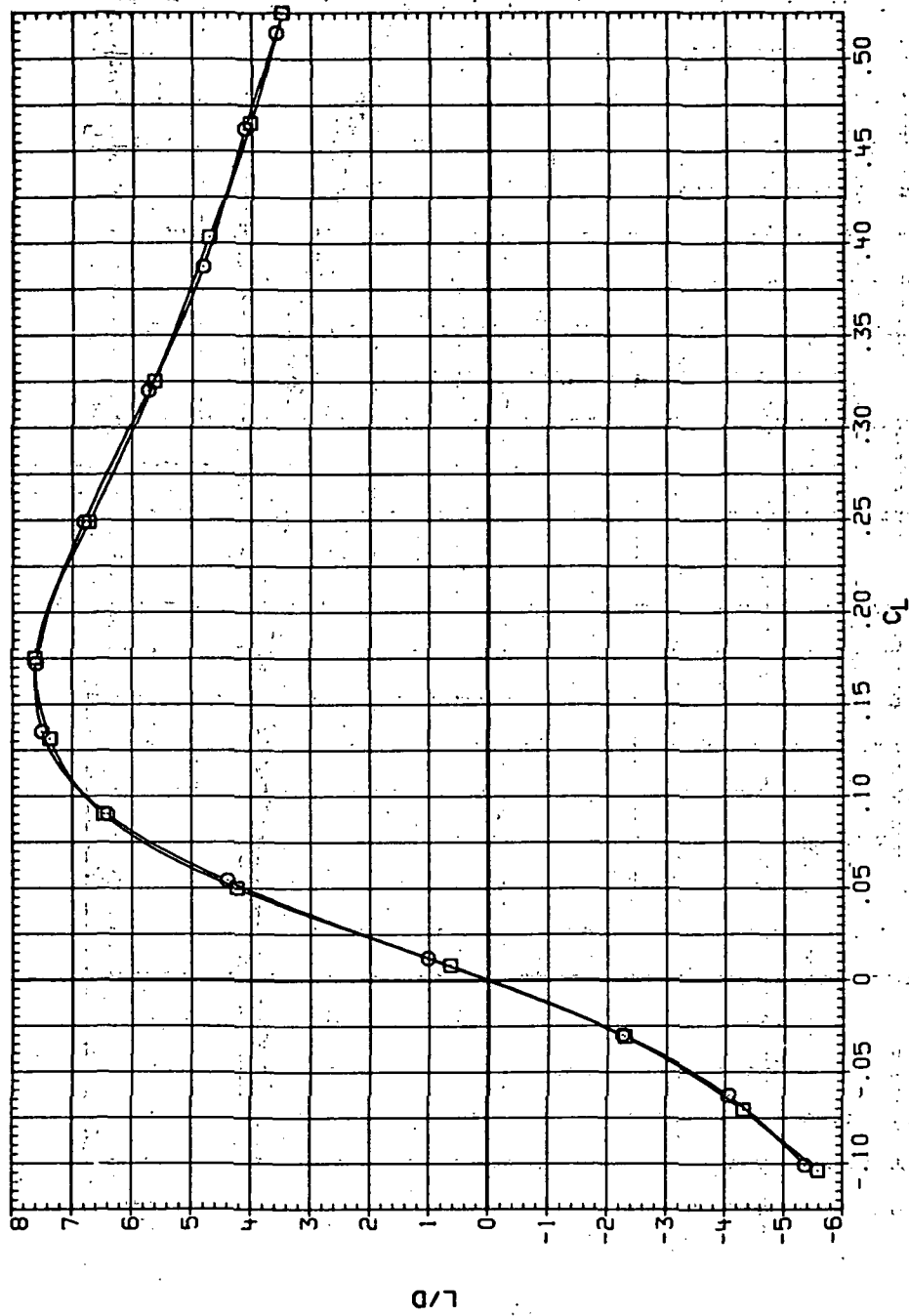


(c) C_m vs C_L .

Figure 84.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJP211 7450B (STEEL)
 RJP257 7450B (STEEL)

RN/L Q(NSH)
 8,230 18,500
 8,200 24,700

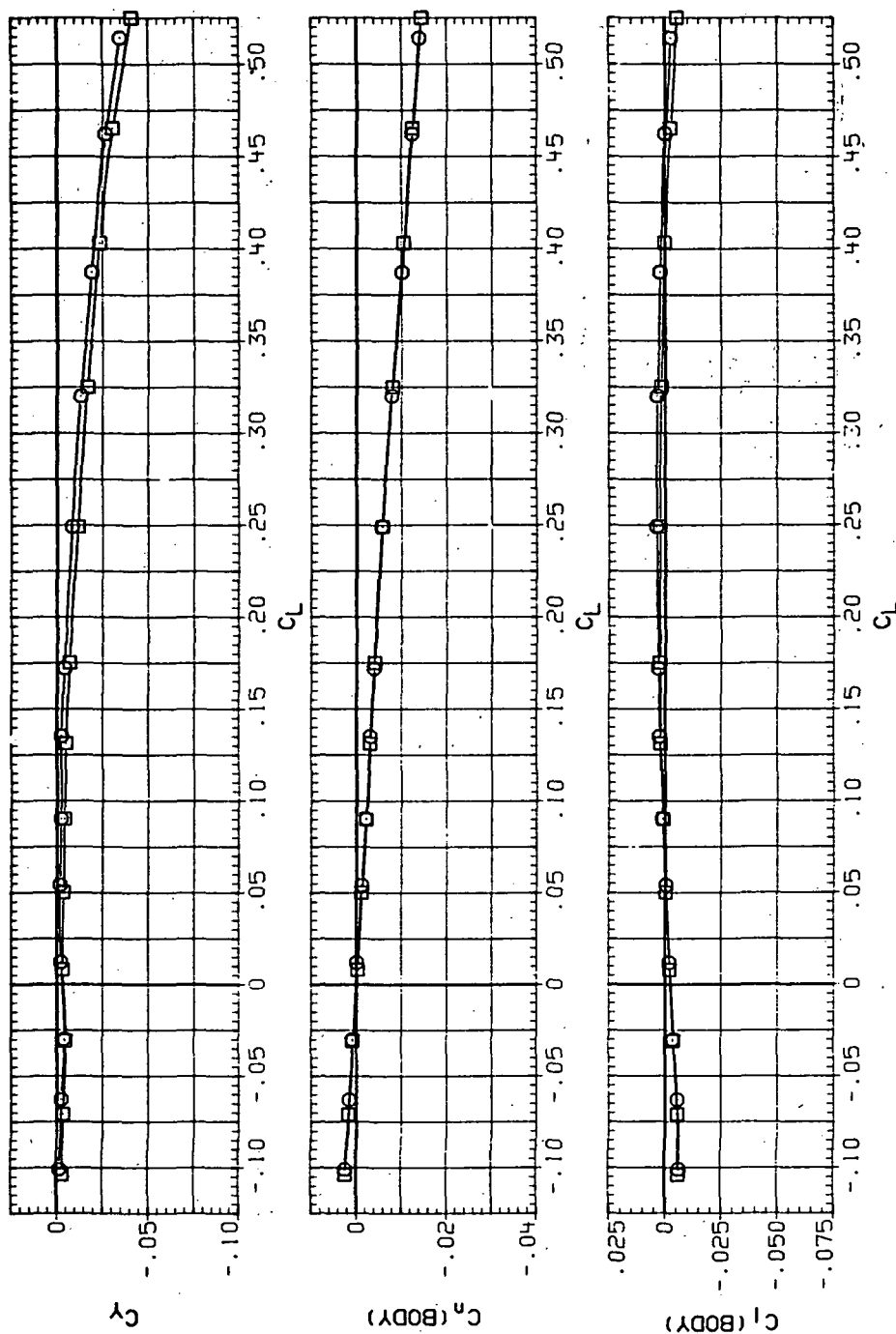


(d) L/D vs C_L .

Figure 84. — Continued.

DATA SET SYMBOL . CONFIGURATION
 RJR211 □ 74608 (STEEL)
 RJR257 □ 74608 (STEEL)

RN/L Q(NSM)
 6.230 18.500
 8.200 24.700

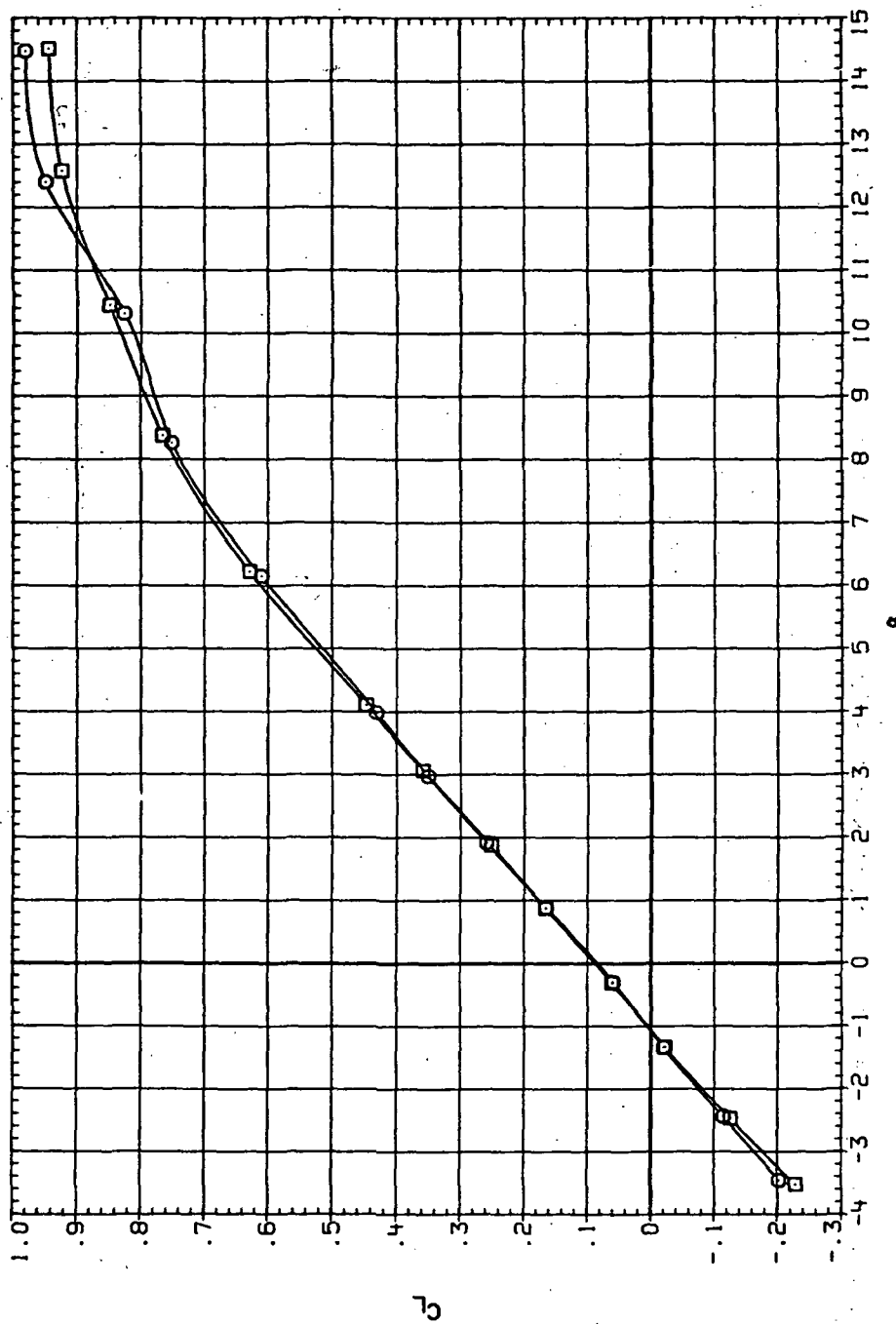


(e) C_Y , C_n and C_l vs C_L .

Figure 84. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR167 7408 (STEEL)
 RJR213 7408 (STEEL)

RN/L Q(NSH)
 8.230 7.480
 8.200 9.900

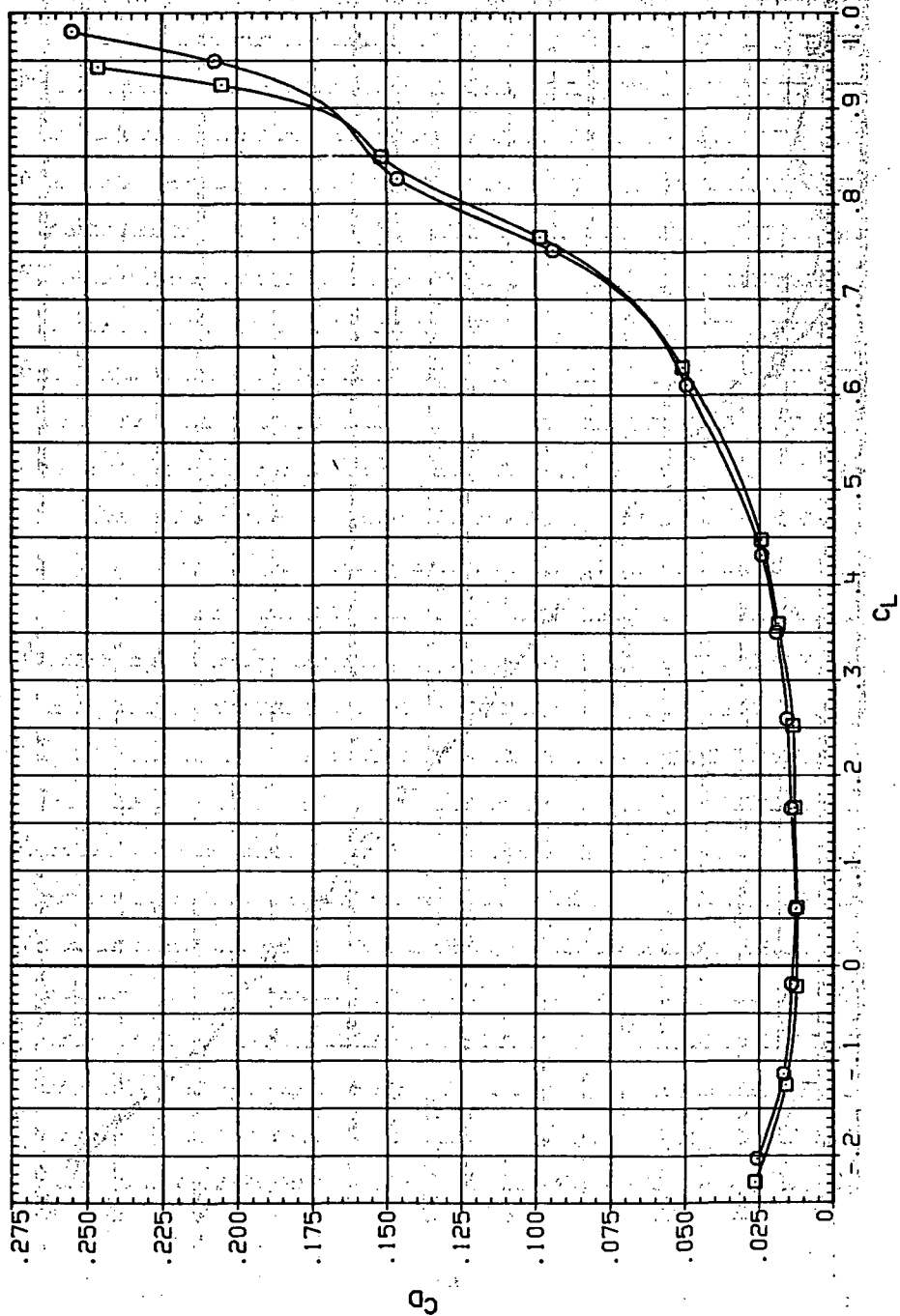


(a) C_L vs α .

Figure 85.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.4$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R1R187 7408 (STEEL)
 R1R213 7408 (STEEL)

RN/L Q(NSH)
 6.230 7.480
 8.200 9.900

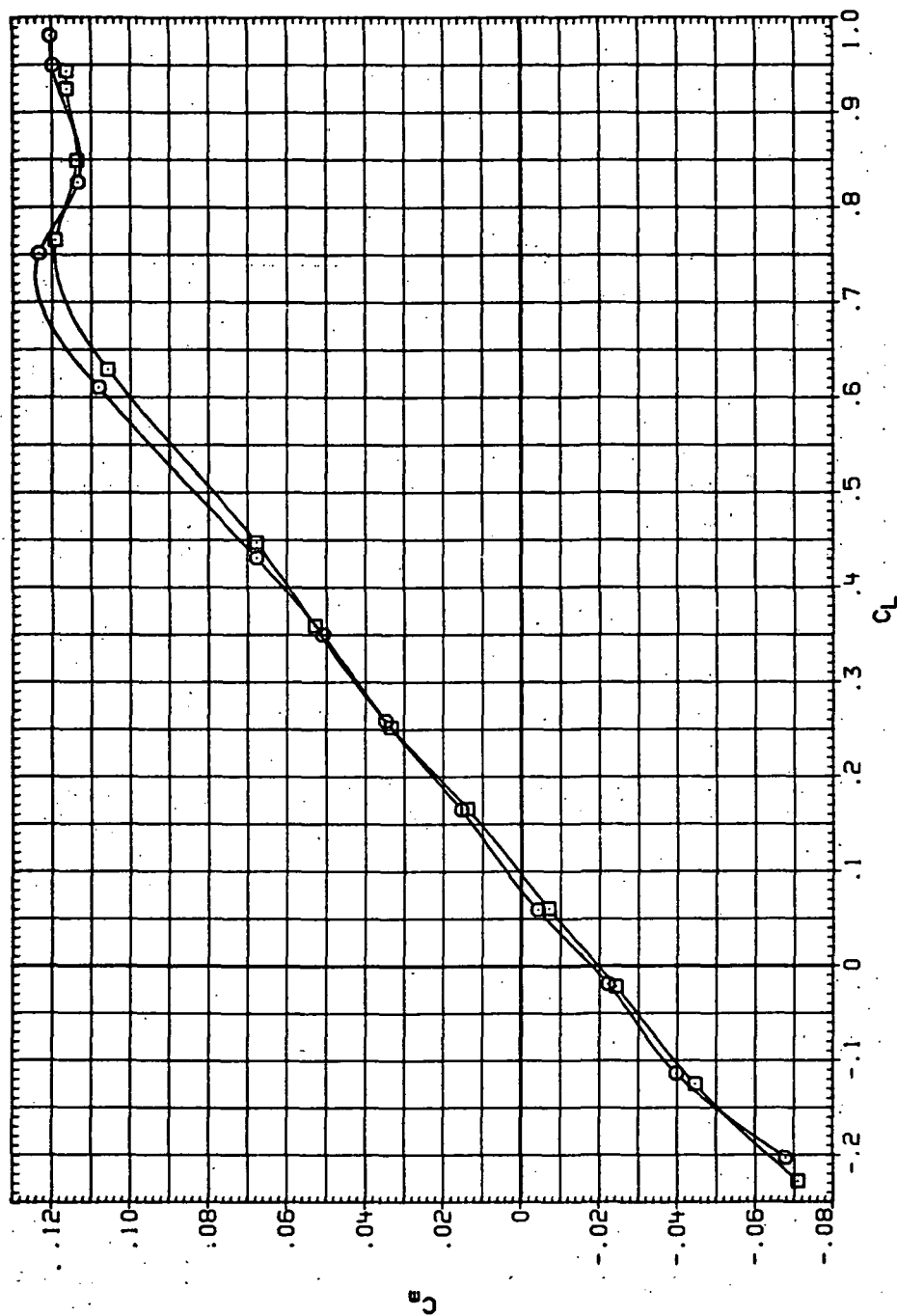


(b) C_D vs C_L

Figure 85. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR167 7408 (STEEL)
 RJR213 7408 (STEEL)

RV/L Q (INCH)
 8.230 7.480
 8.200 8.800

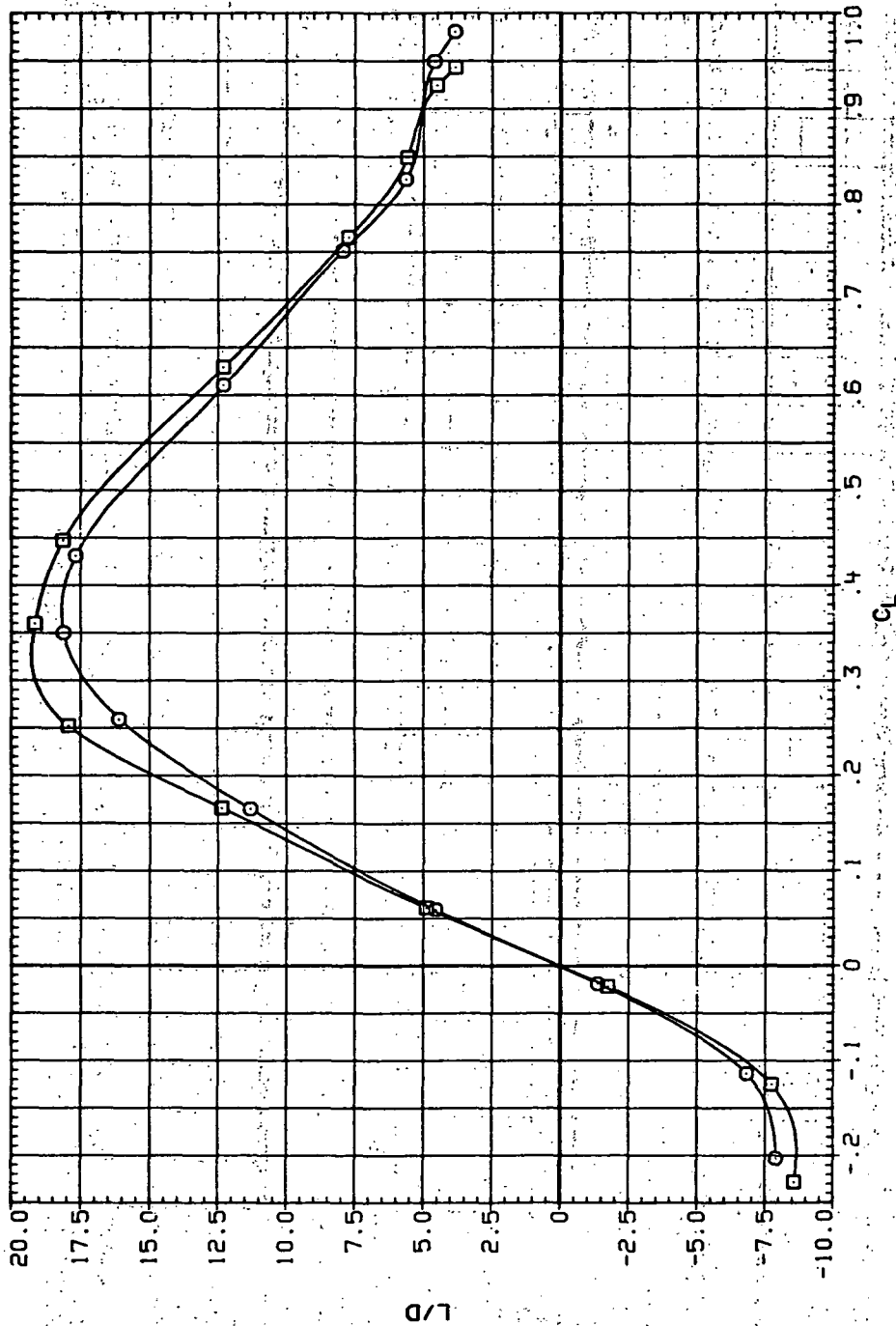


(c) C_m vs C_L

Figure 85.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR167 7408 (STEEL)
 RJR213 7408 (STEEL)

RV/L Q(NSM)
 6.230 7.480
 8.200 9.900

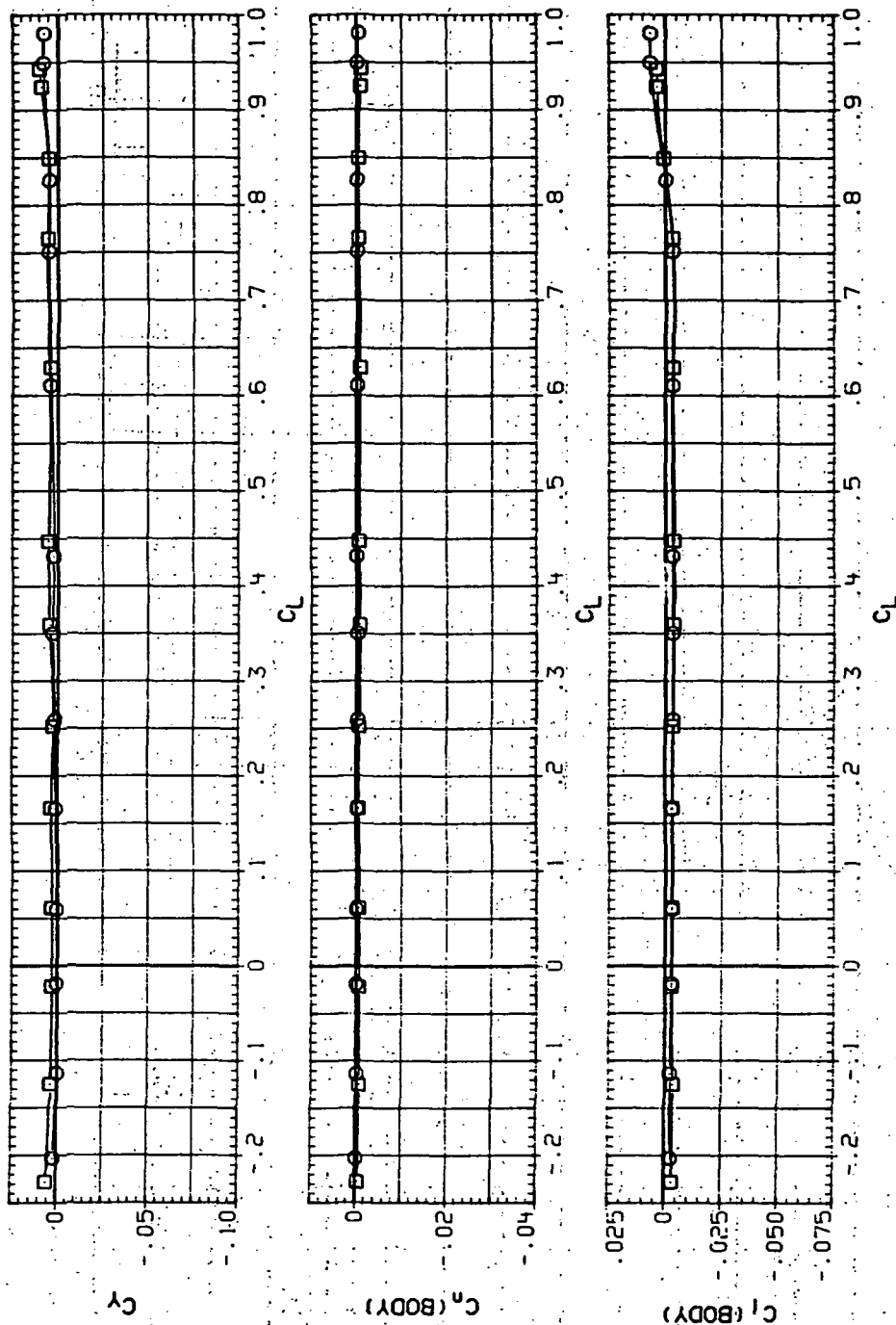


(d) L/D vs C_L

Figure 85. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR167 740B (STEEL)
 RJR213 740B (STEEL)

RN/L Q(NSH)
 6.230 7.480
 8.200 9.900

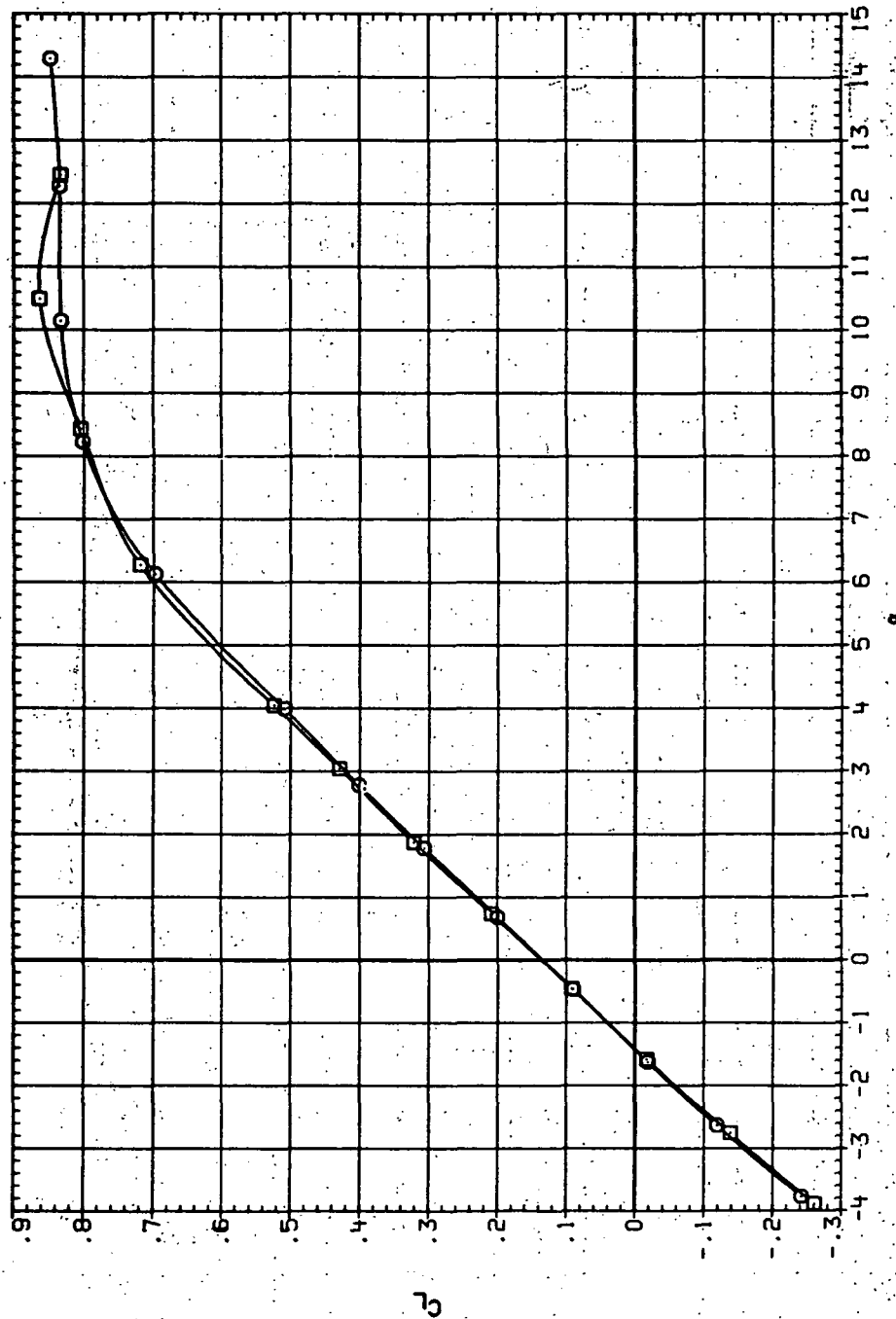


(e) C_Y , C_n and C_l vs C_L .

Figure 85. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RUP168 7A08 (STEEL)
 RUP214 7A08 (STEEL)

RM/L Q (INCH)
 8.230 10.600
 8.200 14.100

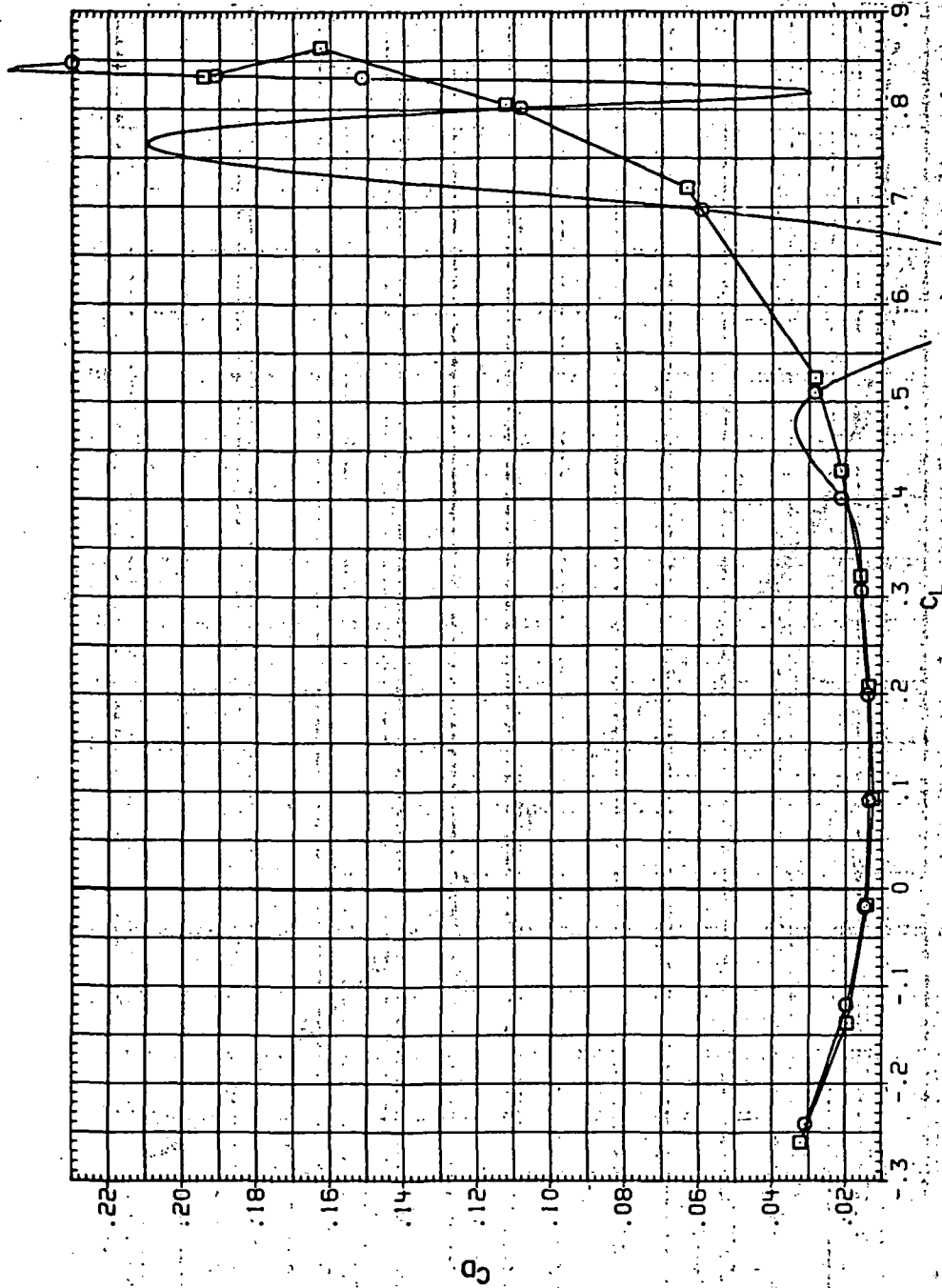


(a) C_L vs α .

Figure 86.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR168 7408 (STEEL)
 RJR214 7408 (STEEL)

RV/L 0 (NSM)
 6.230 10.600
 6.200 14.100

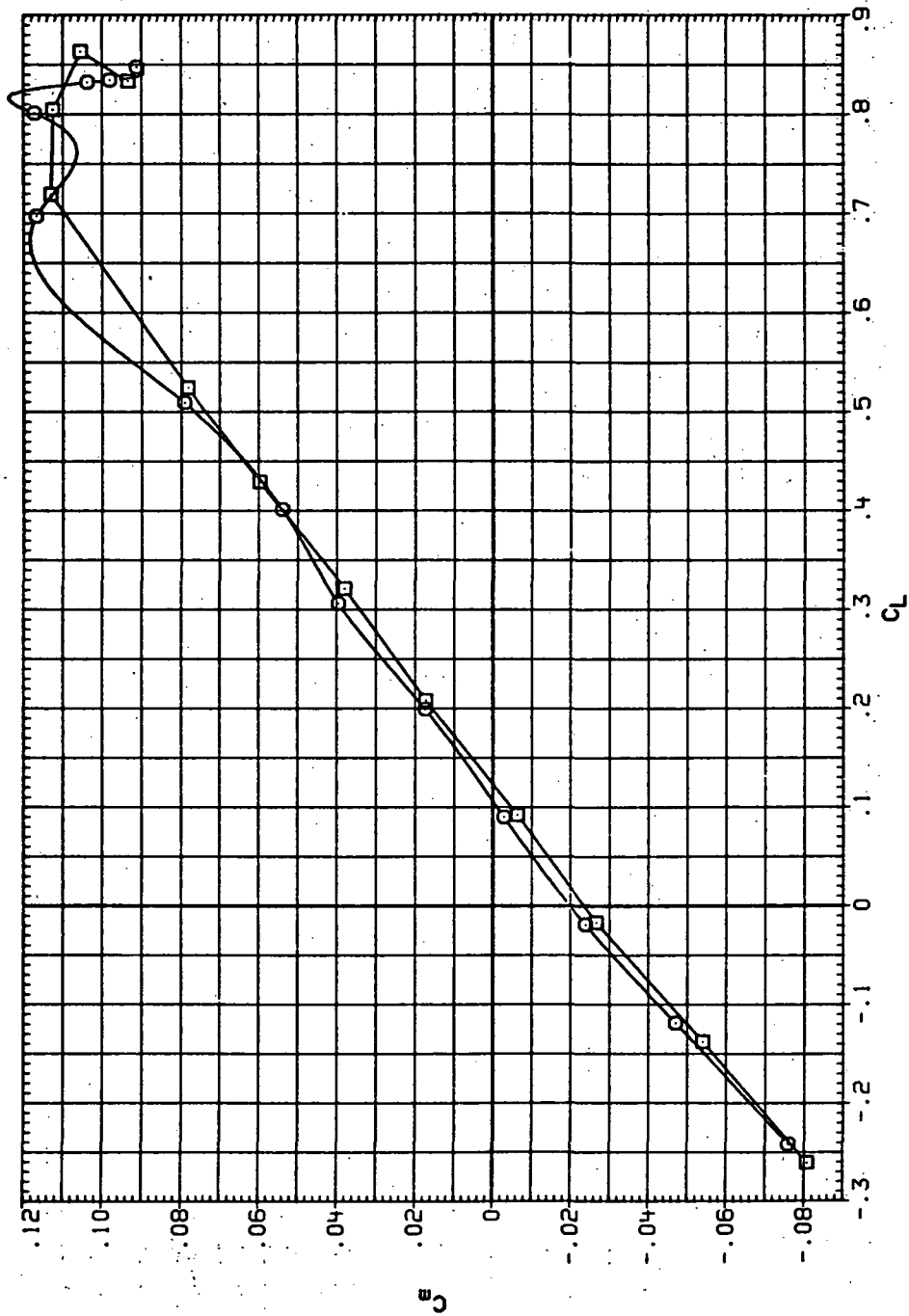


(b) C_D vs C_L

Figure 86.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR168 $\square$ 740B (STEEL)
 RJR214 $\square$ 740B (STEEL)

RN/L Q(NSH)
 8.230 10.800
 8.200 14.100

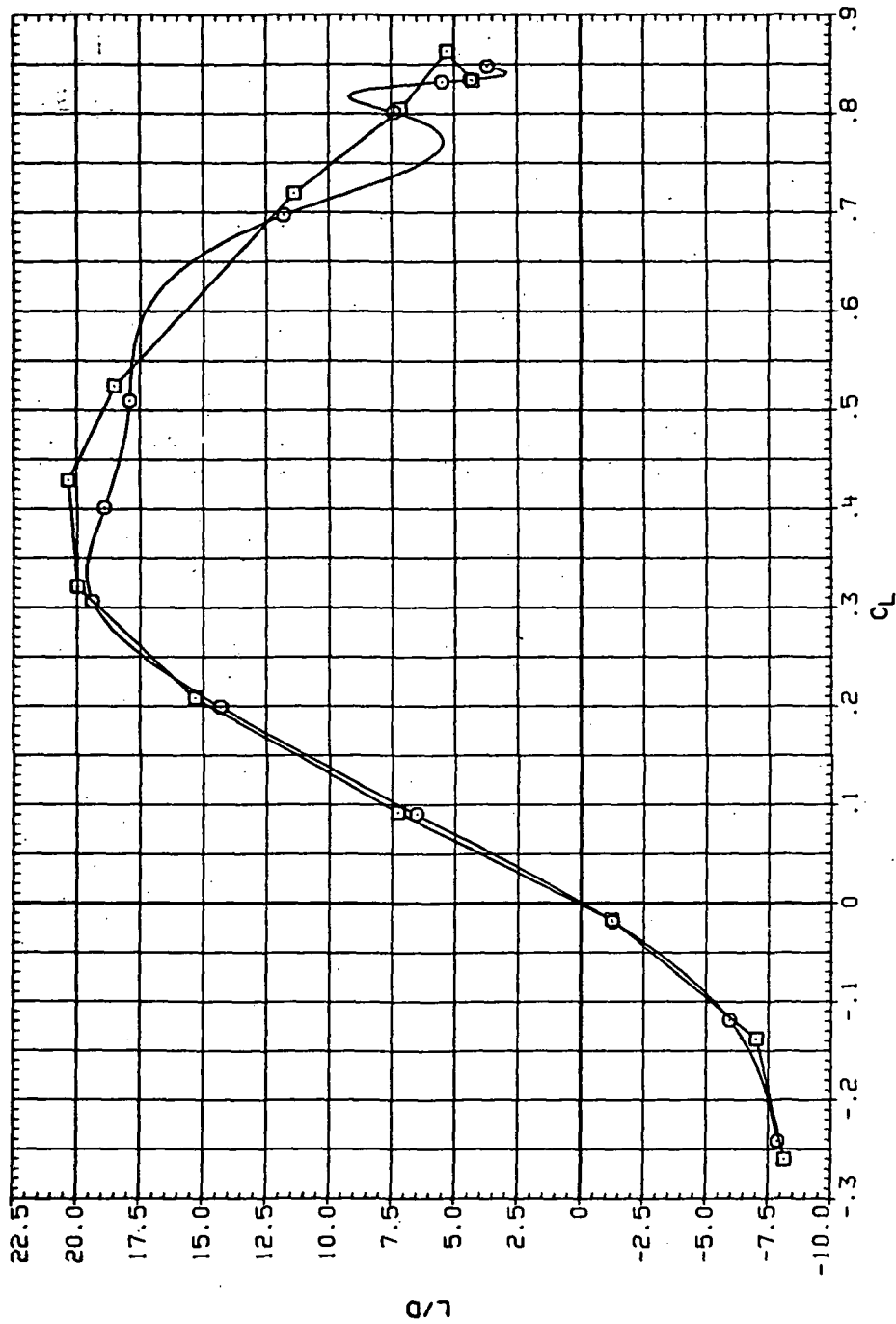


(c) C_m vs C_L .

Figure 86.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR168 740B (STEEL)
 RJR214 740B (STEEL)

RM/L Q(NSH)
 8.230 10.600
 8.200 14.100

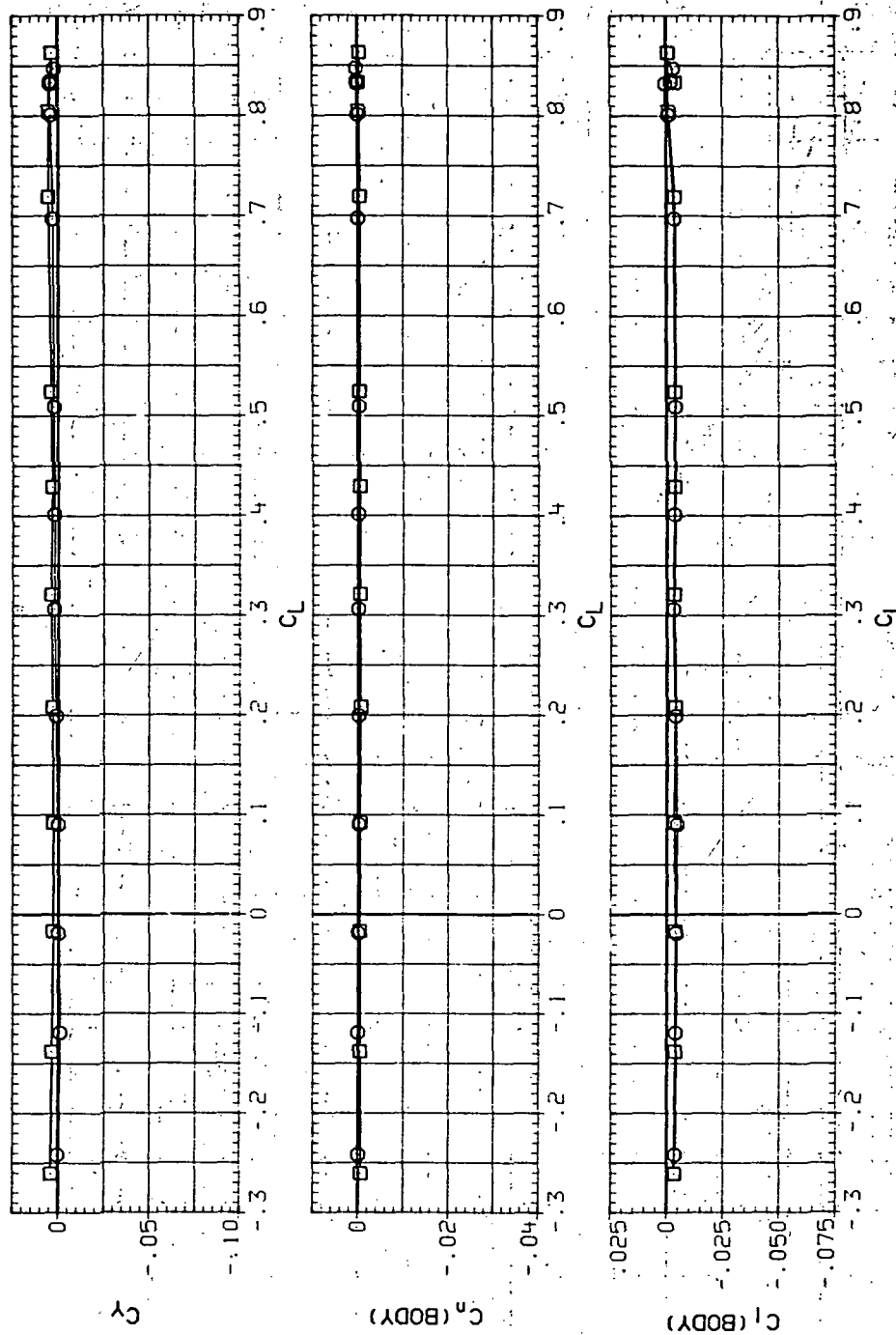


(d) L/D vs C_L .

Figure 86.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR168 740B (STEEL)
 RJR214 740B (STEEL)

RN/L Q INSH
 6.230 10.600
 6.200 14.100

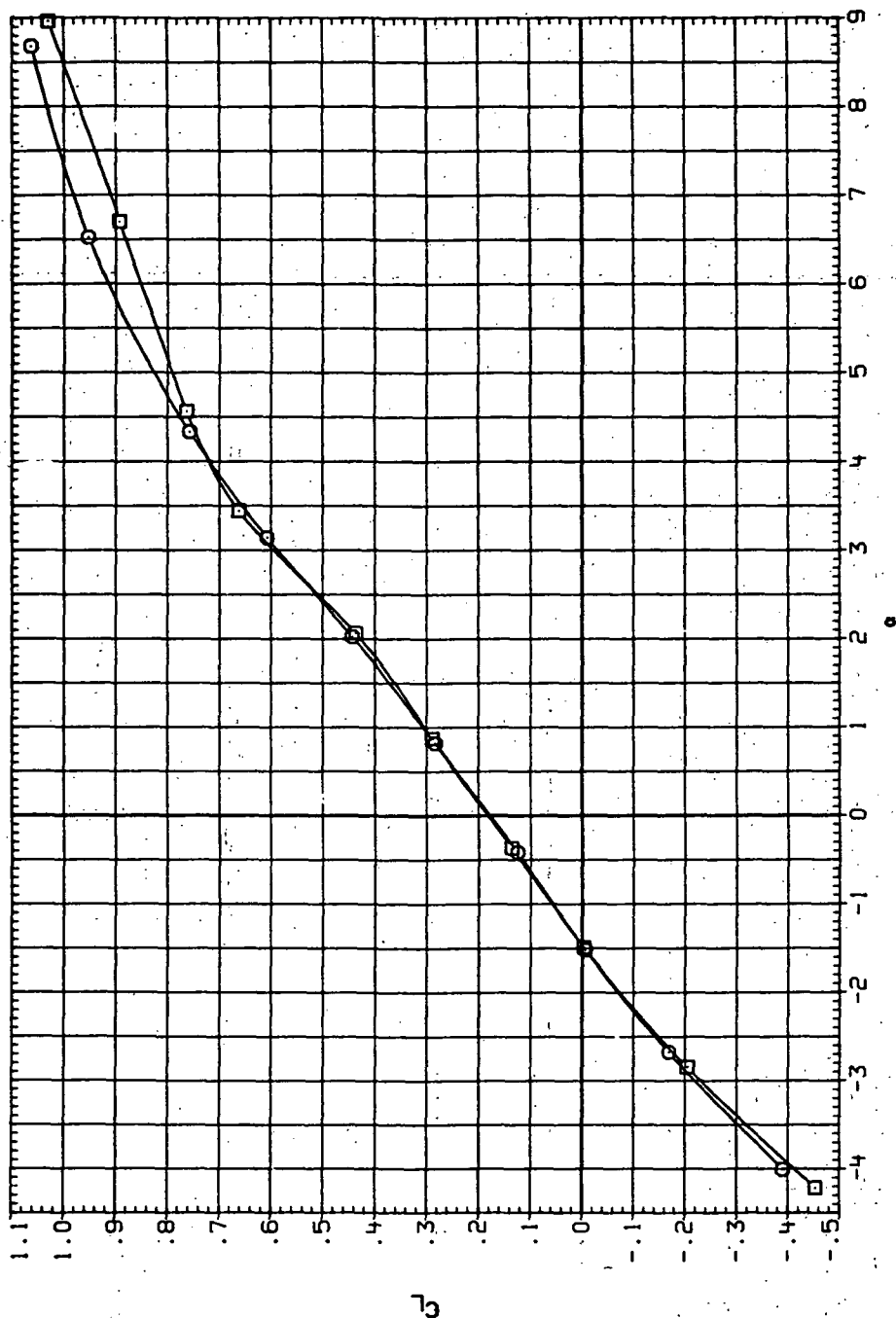


(e) C_Y , C_n and C_l vs C_L .

Figure 86. — Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR169 $\square$ 7408 (STEEL)
 RJR215 $\circ$ 7408 (STEEL)

RM/L Q(NSH)
 6.230 13.400
 8.200 17.800

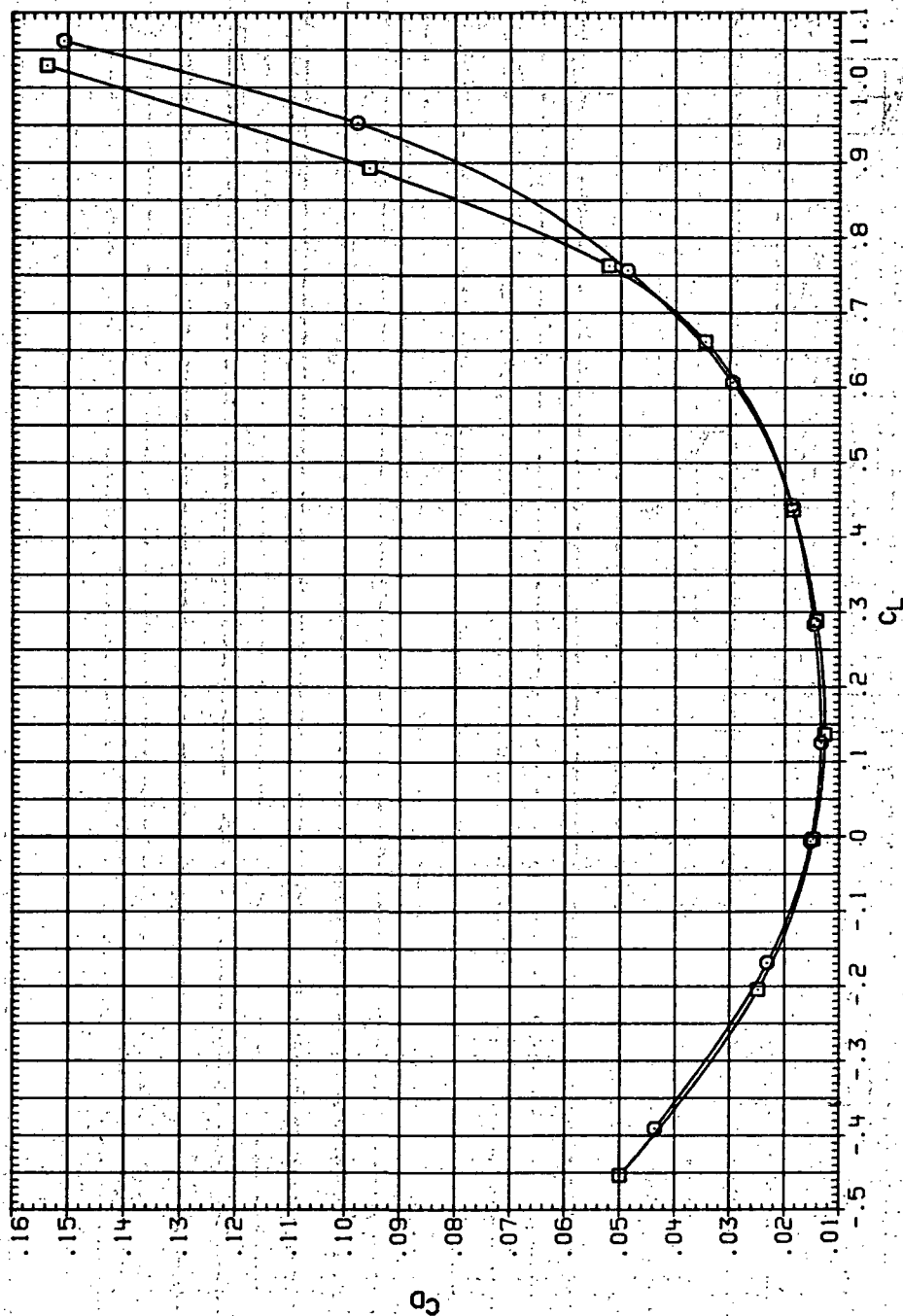


(a) C_L vs α .

Figure 87.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 R.169 7408 (STEEL)
 R.215 7408 (STEEL)

RN/L Q(NSH)
 8.230 13.400
 8.200 17.800

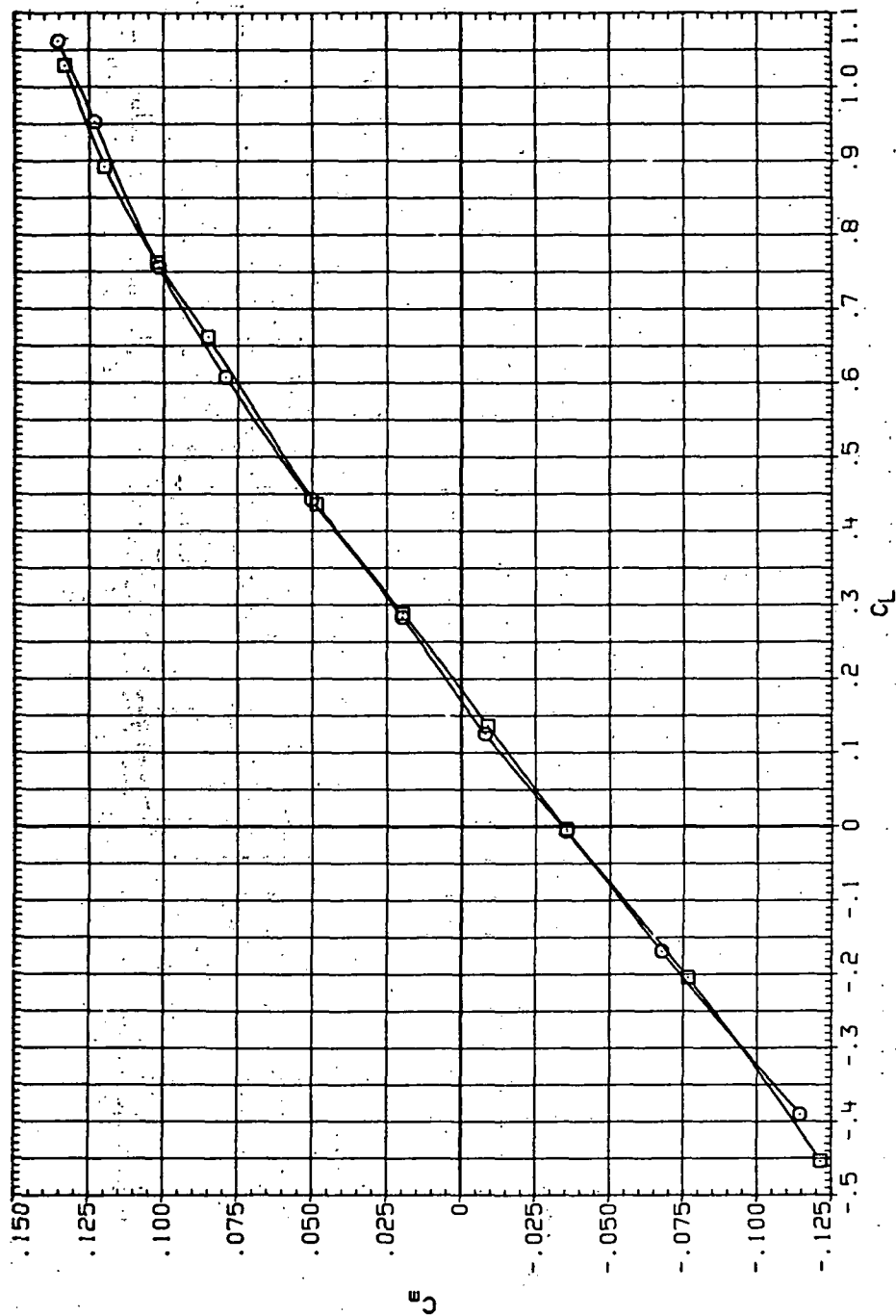


(b) C_D vs C_L .

Figure 87.— Continued:

DATA SET SYMBOL CONFIGURATION
 RJR169 $\square$ 7408 (STEEL)
 RJR215 $\square$ 7408 (STEEL)

RVL Q(NSH)
 6.230 13.400
 6.200 17.800

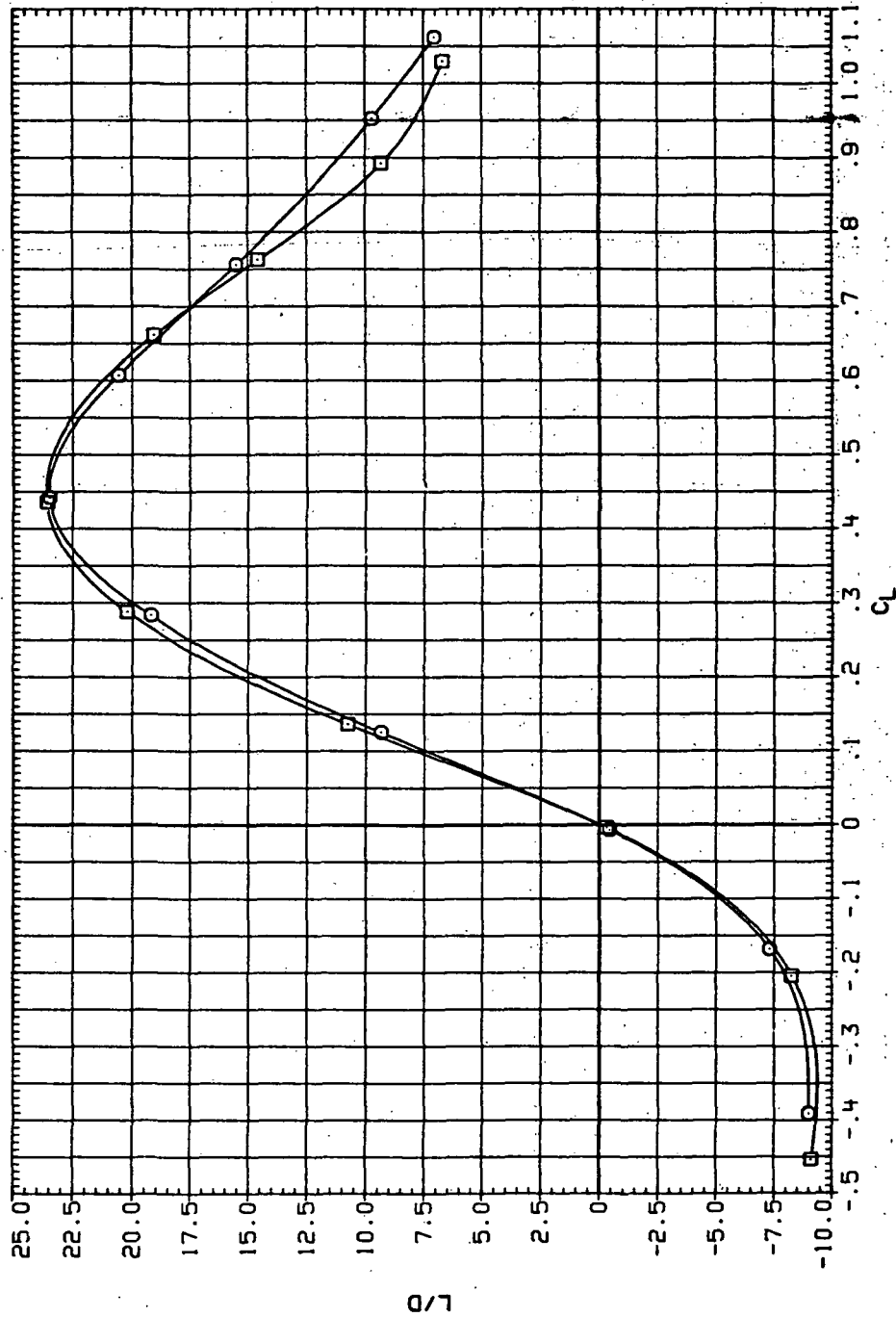


(c) C_m vs C_L

Figure 87. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR169 $\square$ 7M08 (STEEL)
 RJR215 $\square$ 7M08 (STEEL)

RN/L Q(NSH)
 6.230 13.400
 8.200 17.600

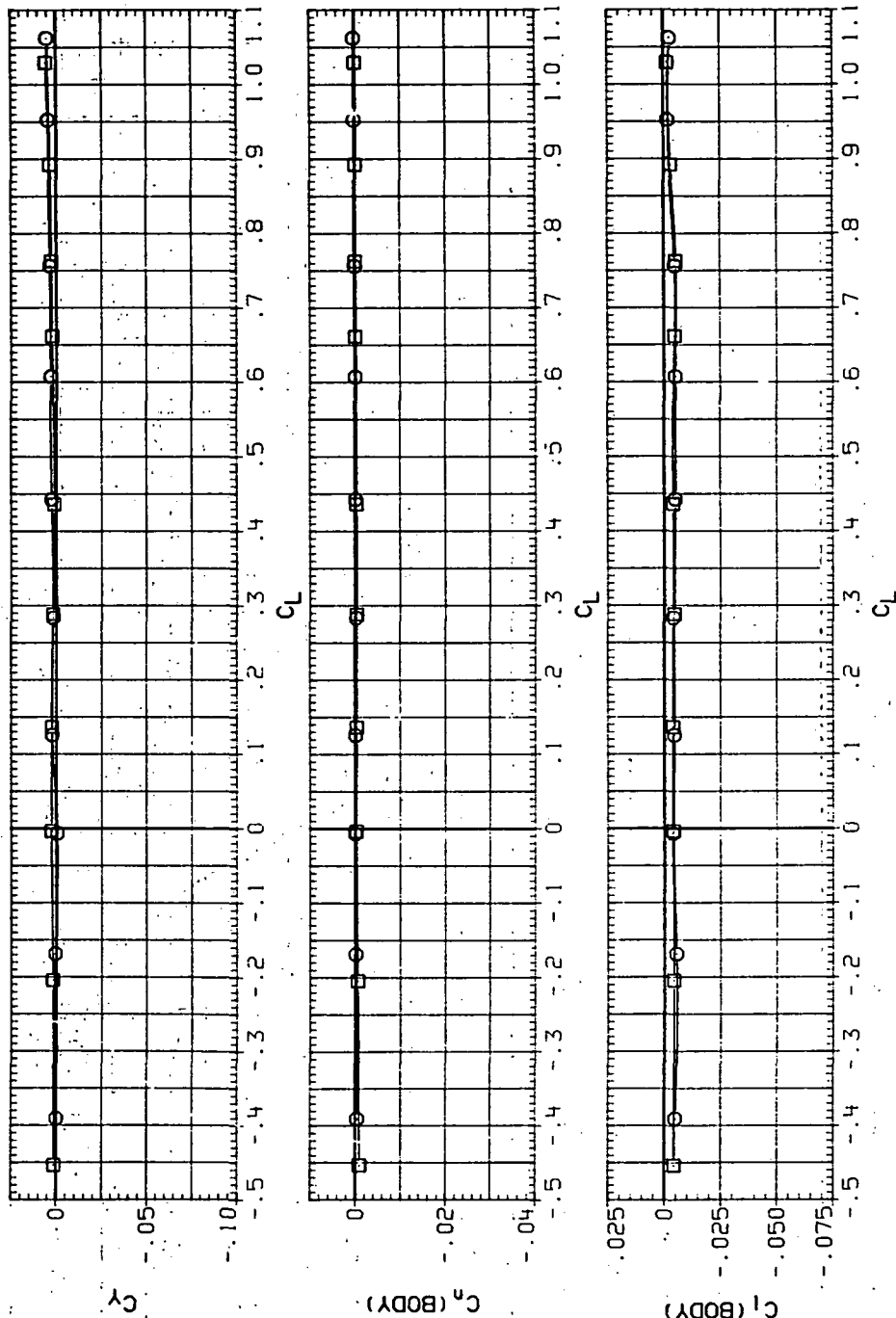


(d) L/D vs C_L

Figure 87.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR169 740B (STEEL)
 RJR215 740B (STEEL)

RN/L Q(NSM)
 6,230 13,400
 8,200 17,800

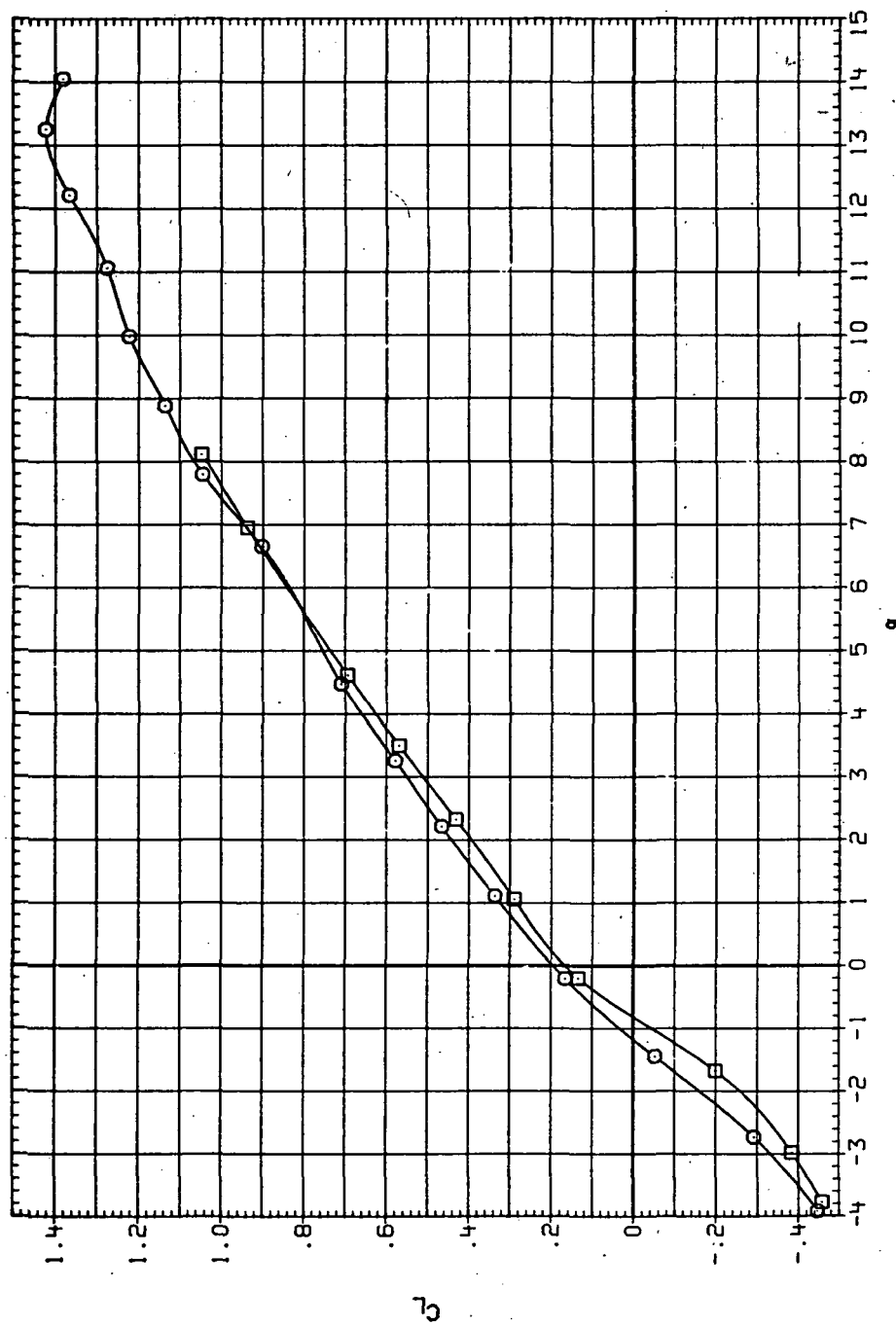


(e) C_Y , C_n and C_l vs C_L .

Figure 87.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR170 $\square$ 7MOB (STEEL)
 RJR216 $\square$ 7MOB (STEEL)

RV/L Q (INCH)
 8.230 14.500
 8.200 19.200

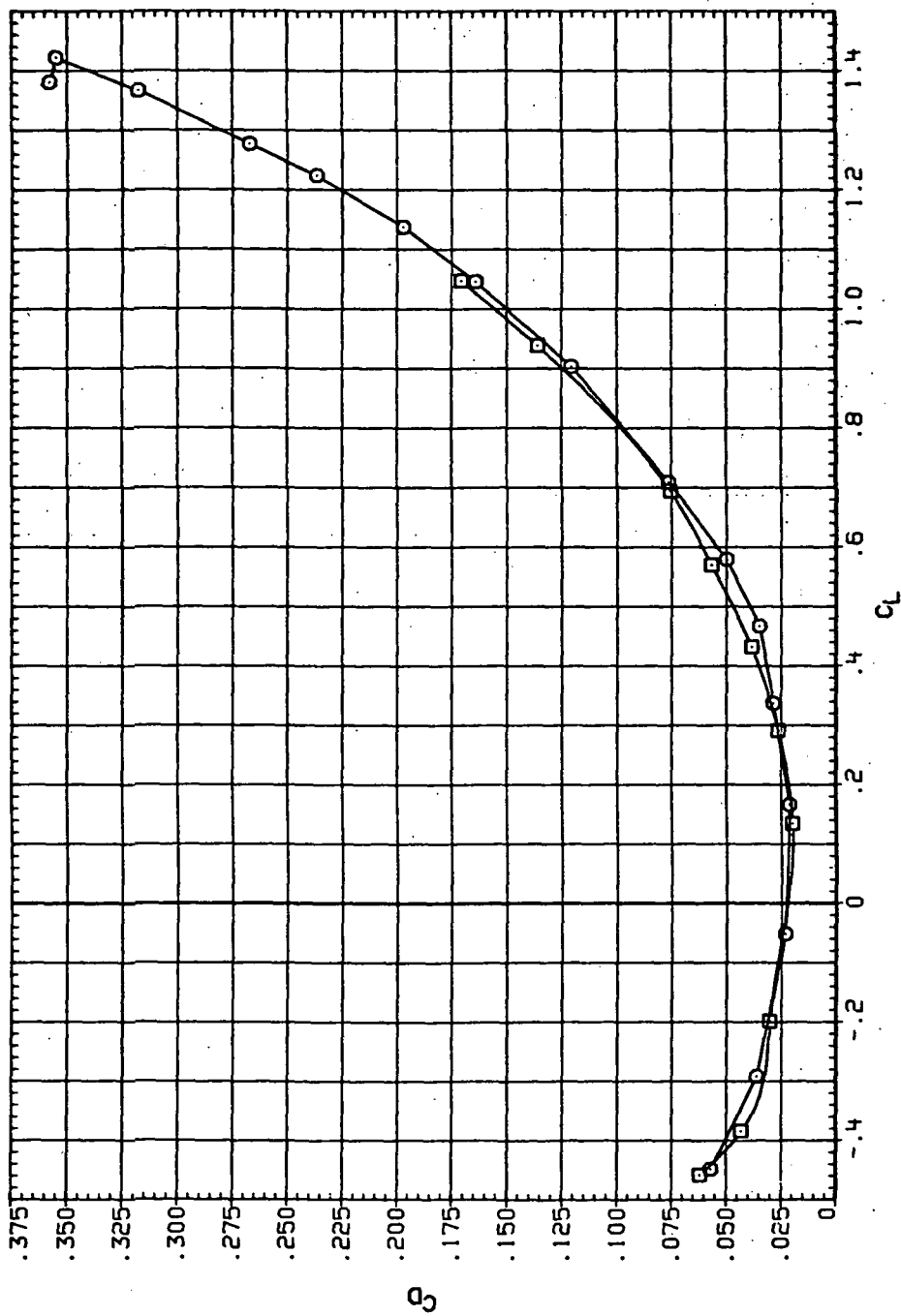


(a) C_L vs α .

Figure 88.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.9$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR170 $\square$ 7NDB (STEEL)
 RJR216 $\square$ 7NDB (STEEL)

RN/L Q(NSH)
 6.230 14.500
 8.200 19.200

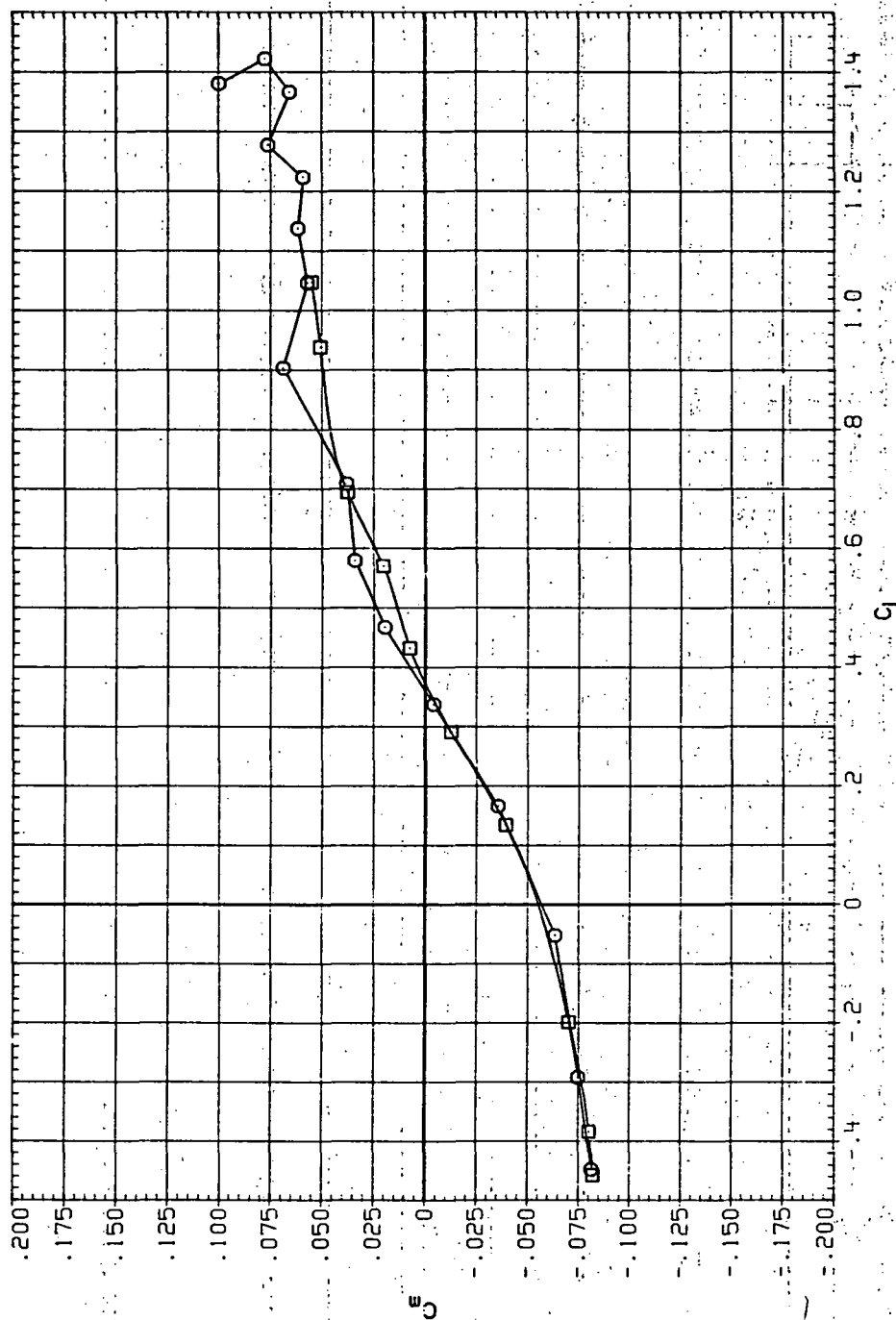


(b) C_D vs C_L .

Figure 88.-- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR170 740B (STEEL)
 RJR216 740B (STEEL)

RN/L Q(NSH)
 6.230 14.500
 8.200 19.200

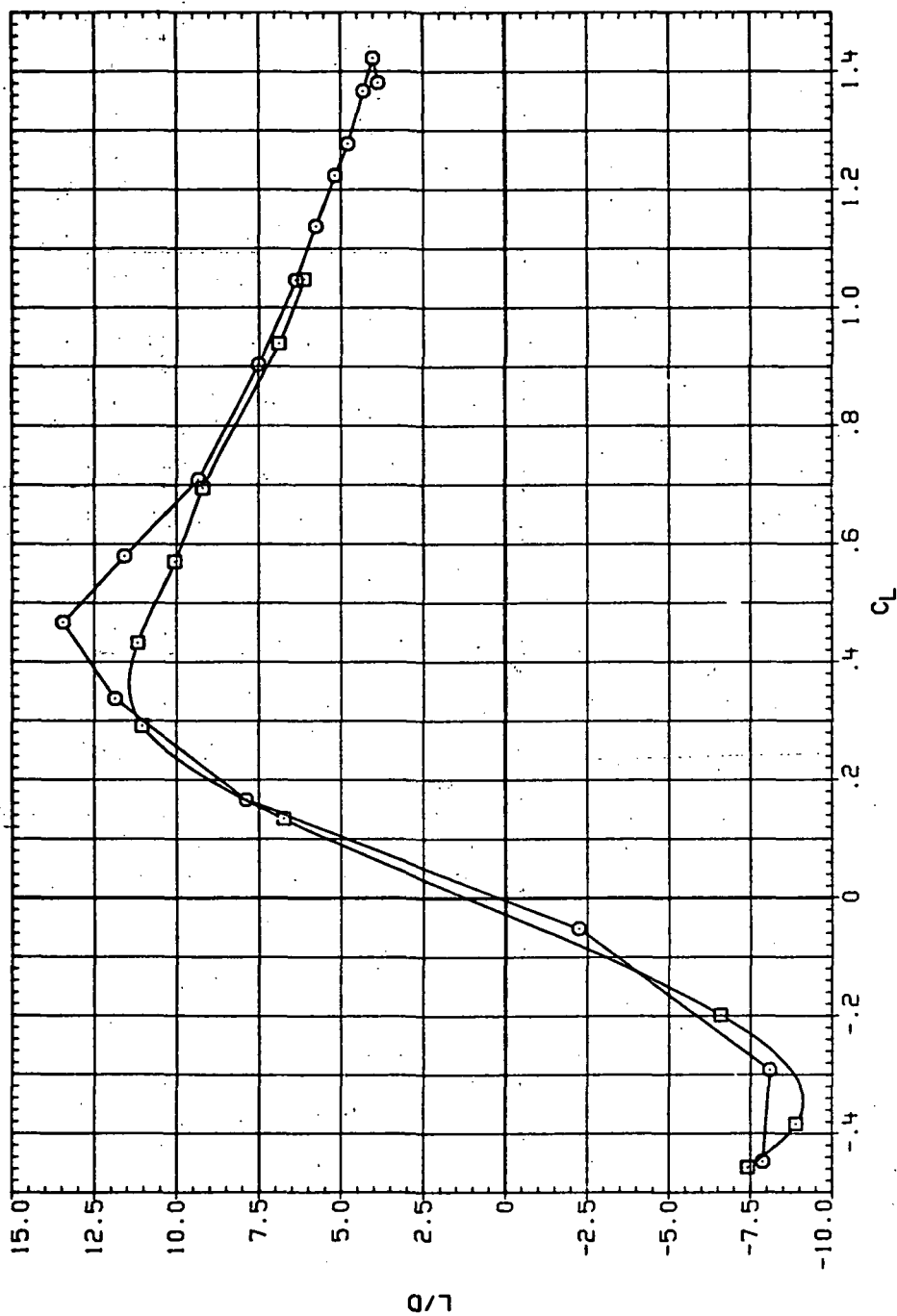


(c) C_m vs C_L

Figure 88. - Continued.

DATA SET SYMBOL CONFIGURATION
 RJR170 ○ 7N08 (STEEL)
 RJR216 □ 7N08 (STEEL)

RM/L Q (INCH)
 8.230 14.500
 8.260 19.200

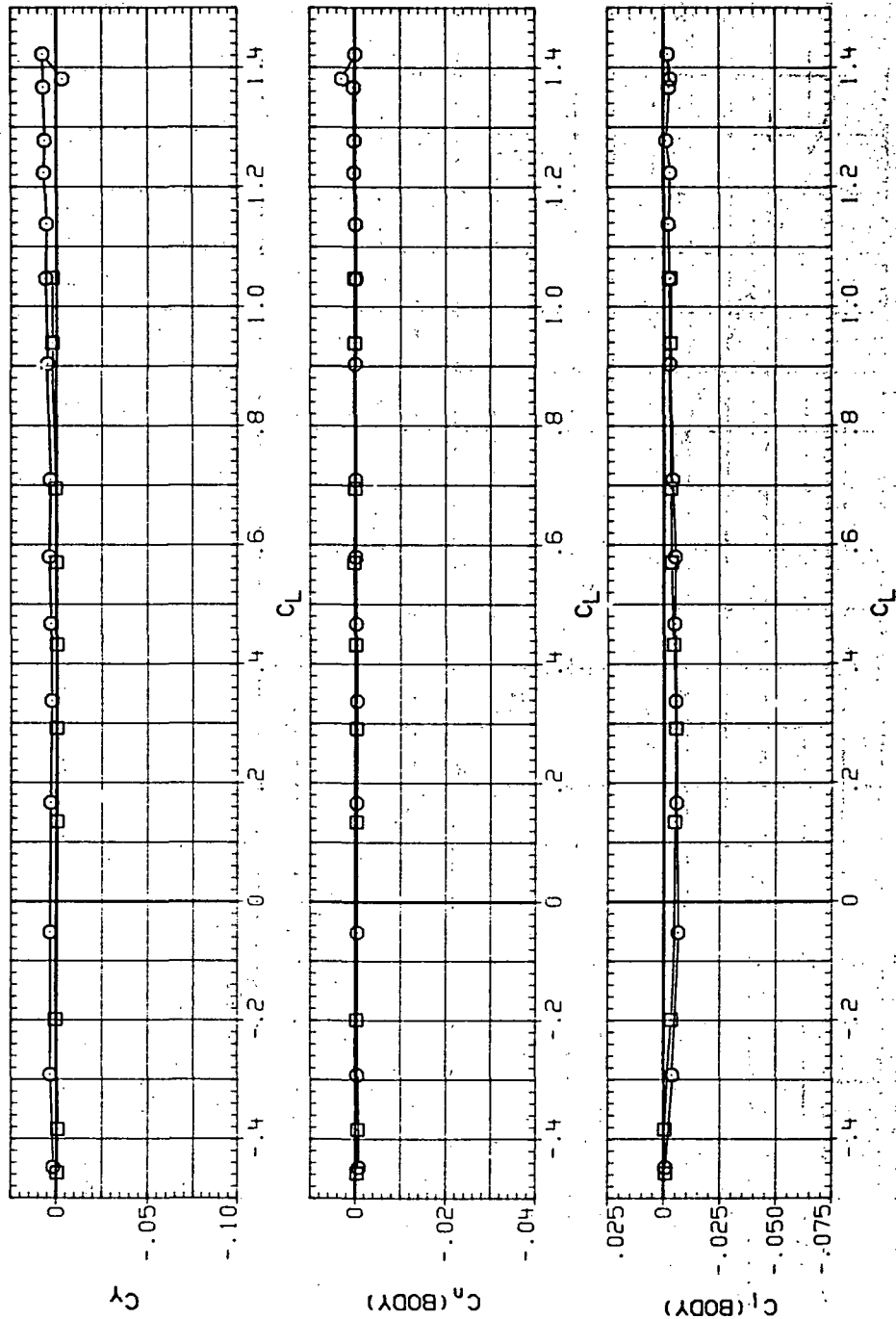


(d) L/D vs C_L .

Figure 88.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR170 740B (STEEL)
 RJR216 740B (STEEL)

RN/L 0.0 (N5M)
 6.230 14.500
 8.200 19.200

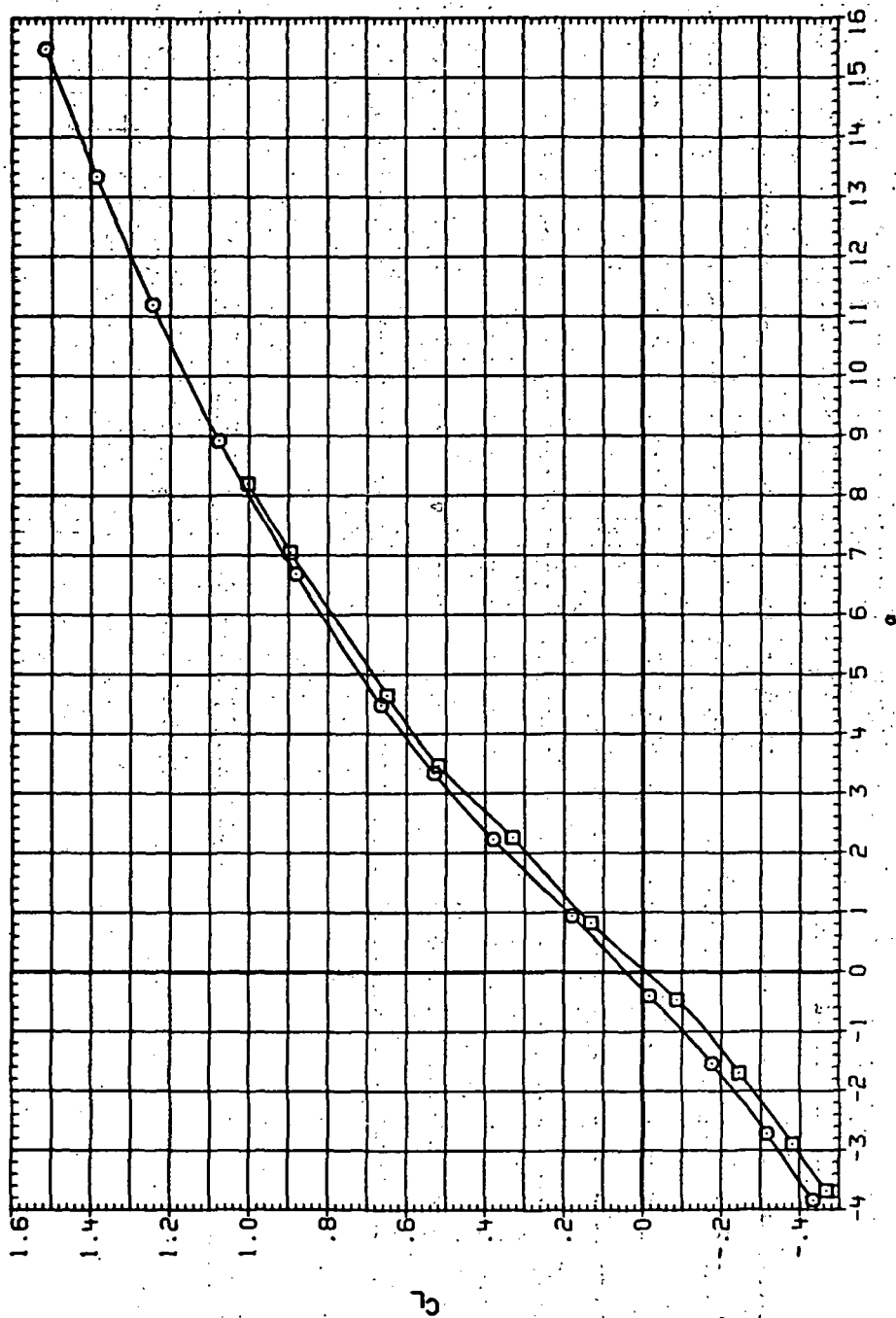


(e) C_Y , C_n and C_l vs C_L .

Figure 88. — Concluded.

Q SET SYMBOL CONFIGURATION
 h-171 7408 (STEEL)
 R-217 7408 (STEEL)

QINSM
 -230 15.000
 8.200 19.800

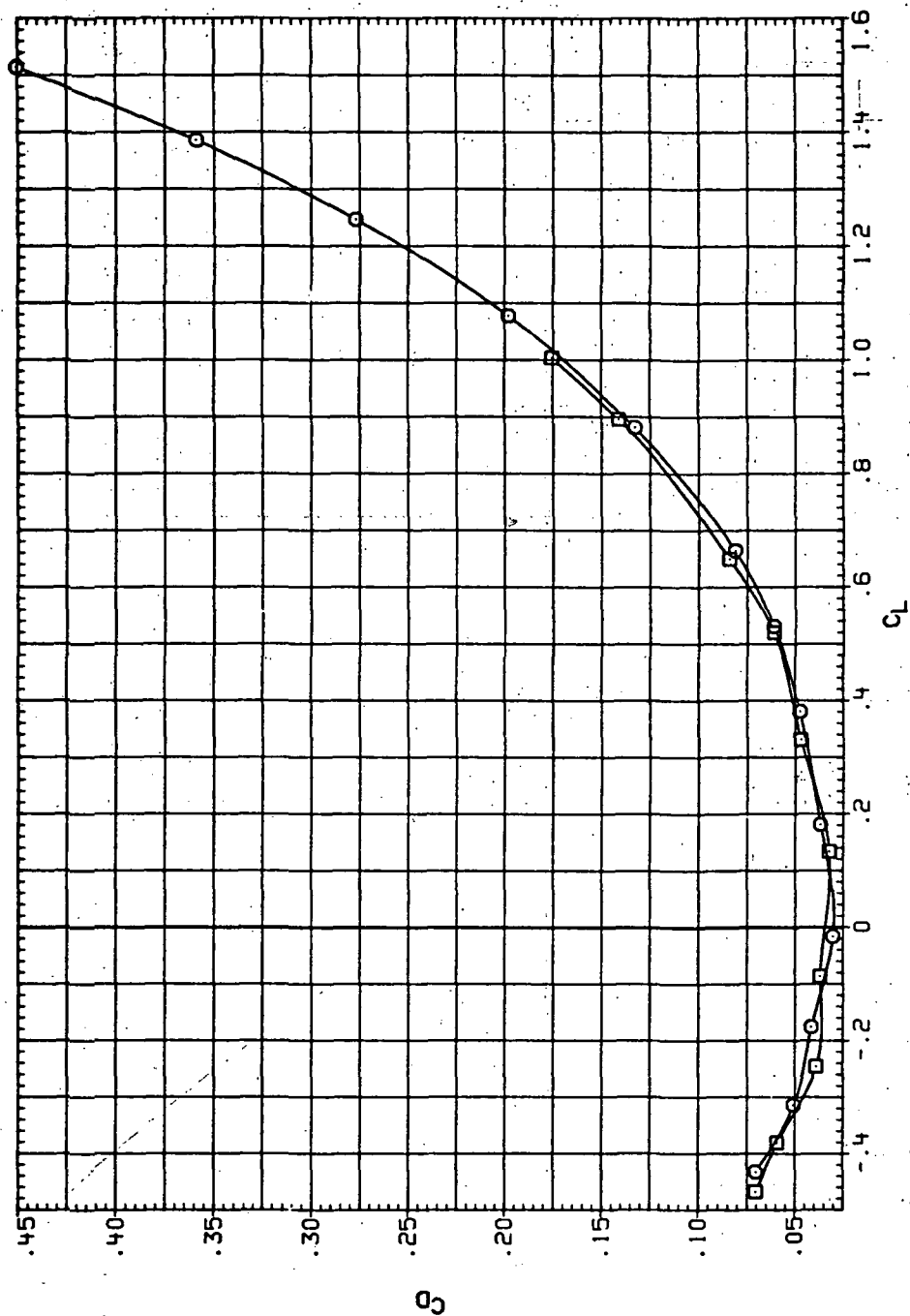


(a) C_L vs α

Figure 89.— Dynamic-pressure effects on the aerodynamic characteristics of the steel trapezoidal oblique wing-body combination ($\Lambda = 0$, $M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 71 7408 (STEEL)
 72 7408 (STEEL)

RV/L 0 (INCH)
 30 15.000
 30 19.900

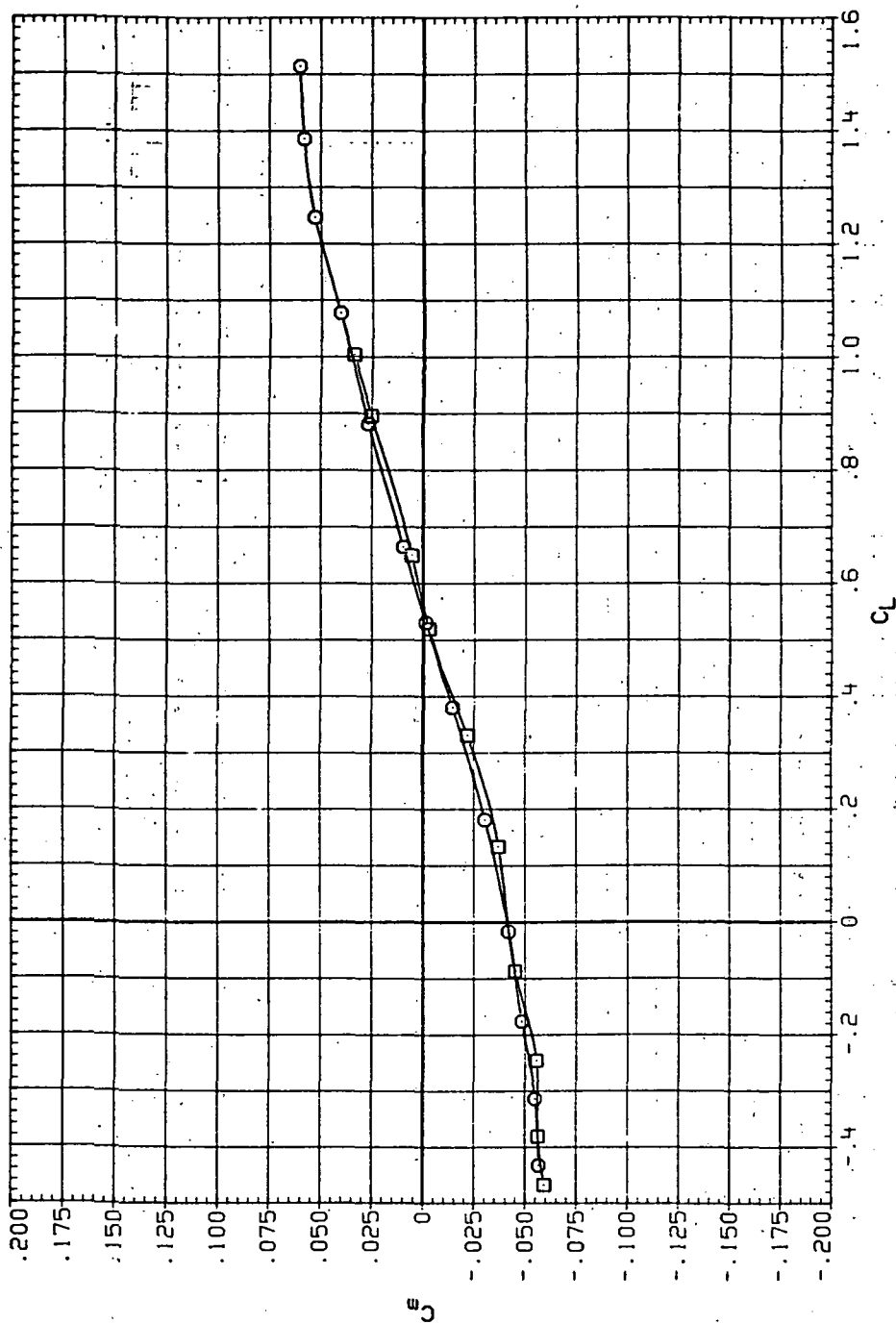


(b) C_D vs C_L .

Figure 89. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUI171 $\square$ 7408 (STEEL)
 RUI217 $\square$ 7408 (STEEL)

RN/L Q(NSM)
 6.230 15.000
 8.200 19.900

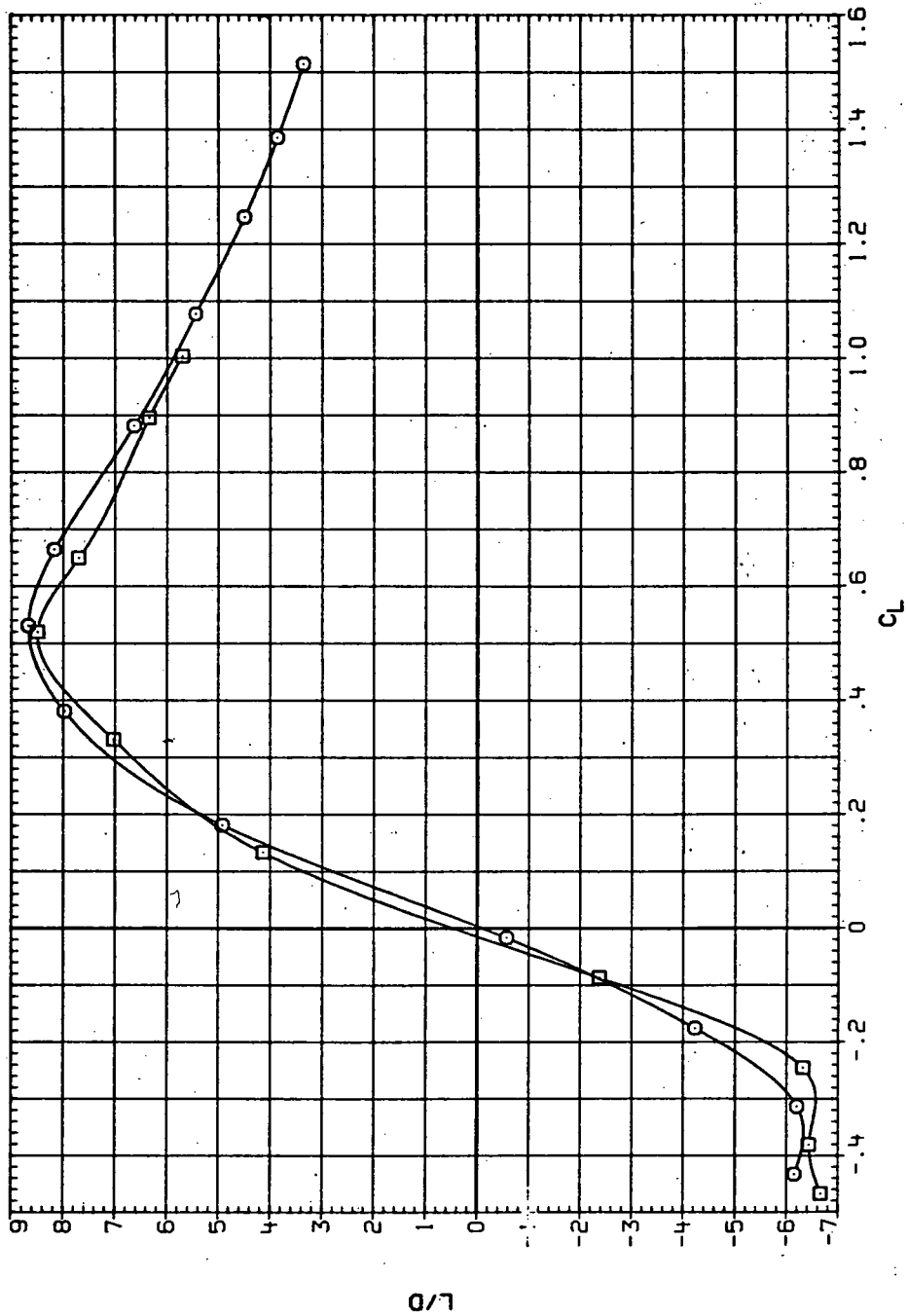


(c) C_m vs C_L .

Figure 89.—Continued.

DATA SET SYMBOL CONFIGURATION
 RJR171 ○ 7N08 (STEEL)
 RJR217 □ 7N08 (STEEL)

RV/L Q(NSH)
 8.230 15.000
 8.200 19.900

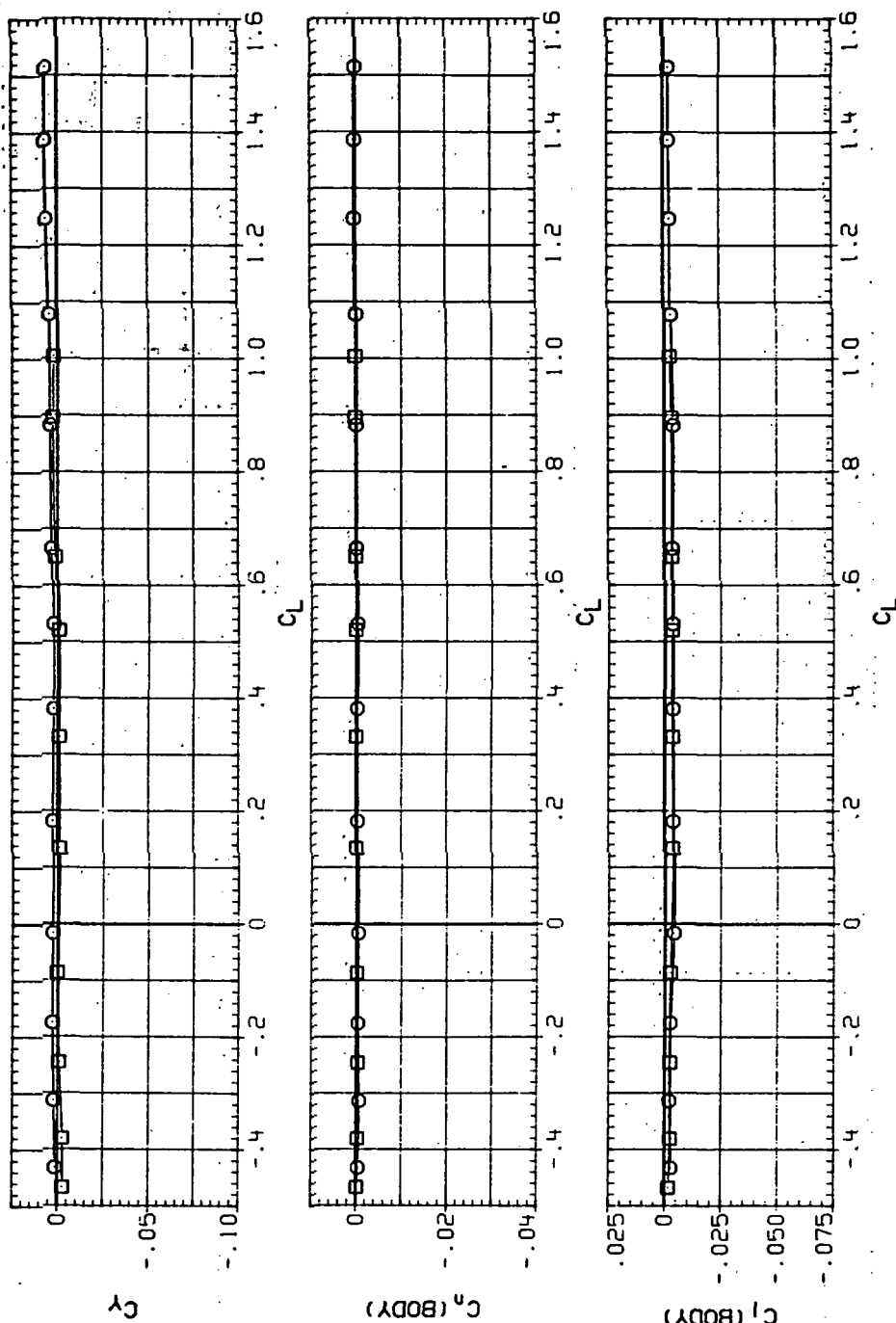


(d) L/D vs C_L .

Figure 89.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR171 740B (STEEL)
 RJR217 740B (STEEL)

RV/L Q (NSH)
 6.230 15.000
 8.200 19.900

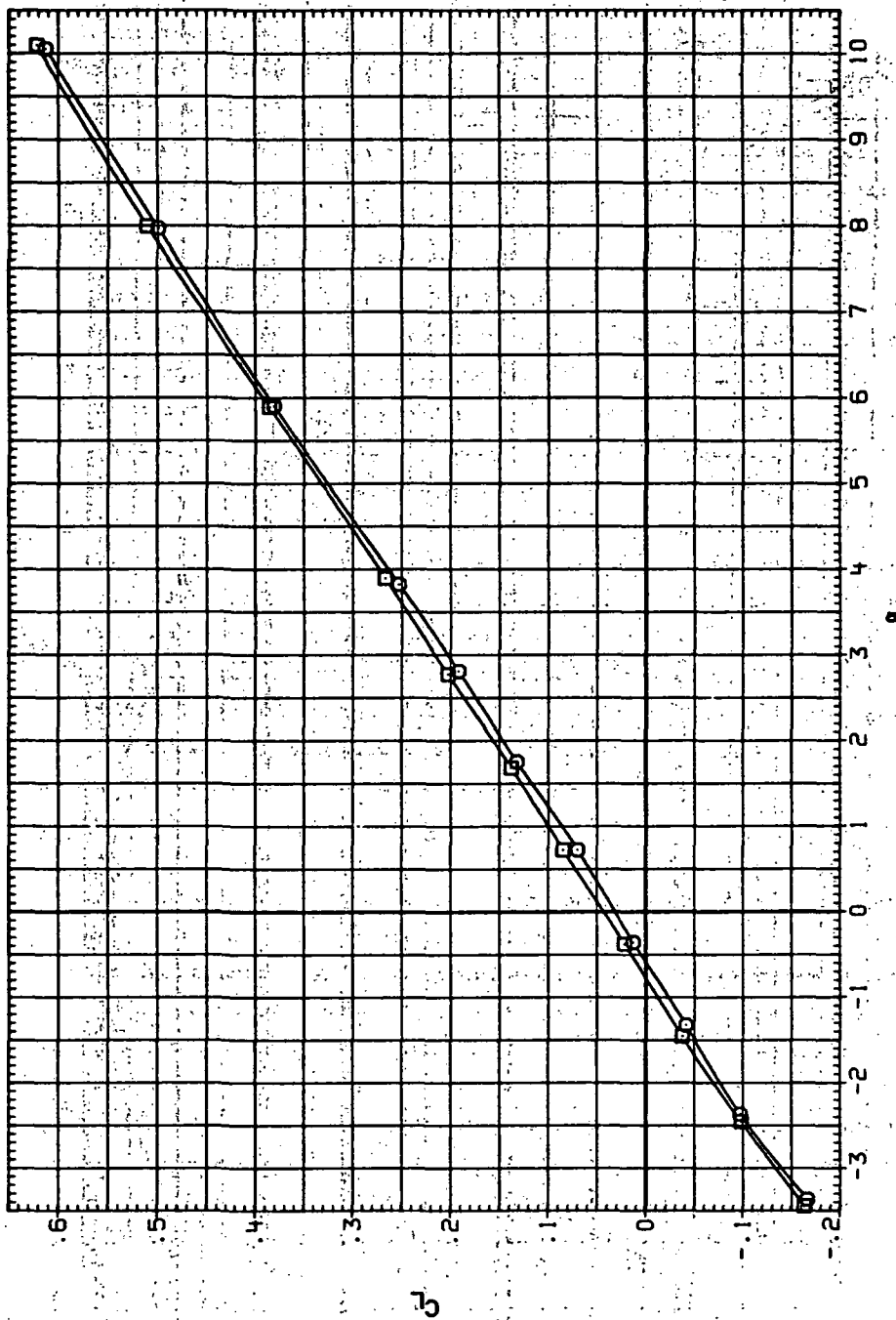


(e) C_Y , C_n and C_l vs C_L .

Figure 89.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ 64A58 (STEEL)
 RJR258 $\square$ 64A58 (STEEL)

RM/L
 6.230
 6.200

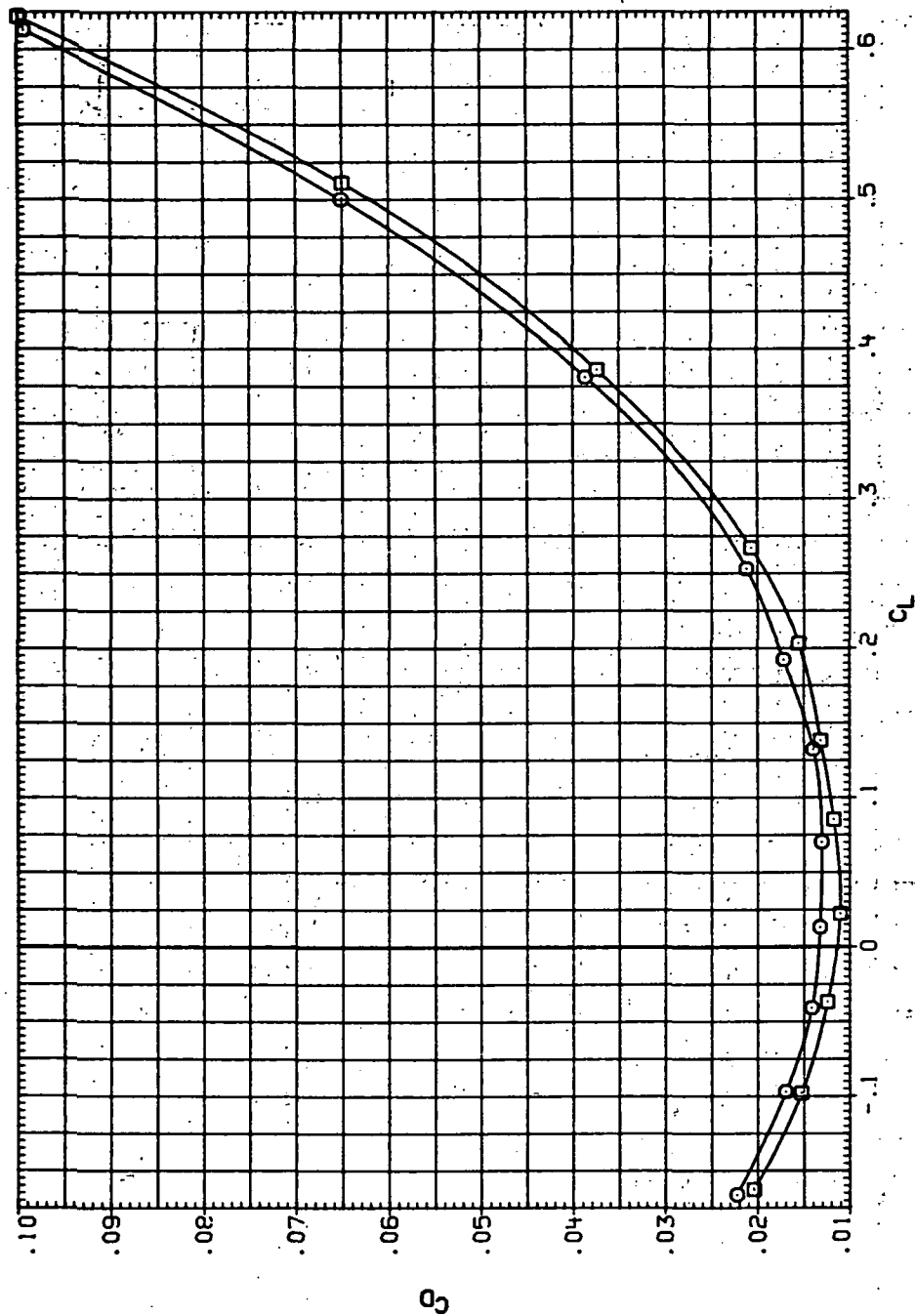


(a) C_L vs α .

figure 90. — Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 0.4$ and the NACA 65A204 airfoil).

C SET SYMBOL CONFIGURATION
 RJR259 8 8A+5B (STEEL)
 RJR258 8 8A+5B (STEEL)

8.230
 8.200

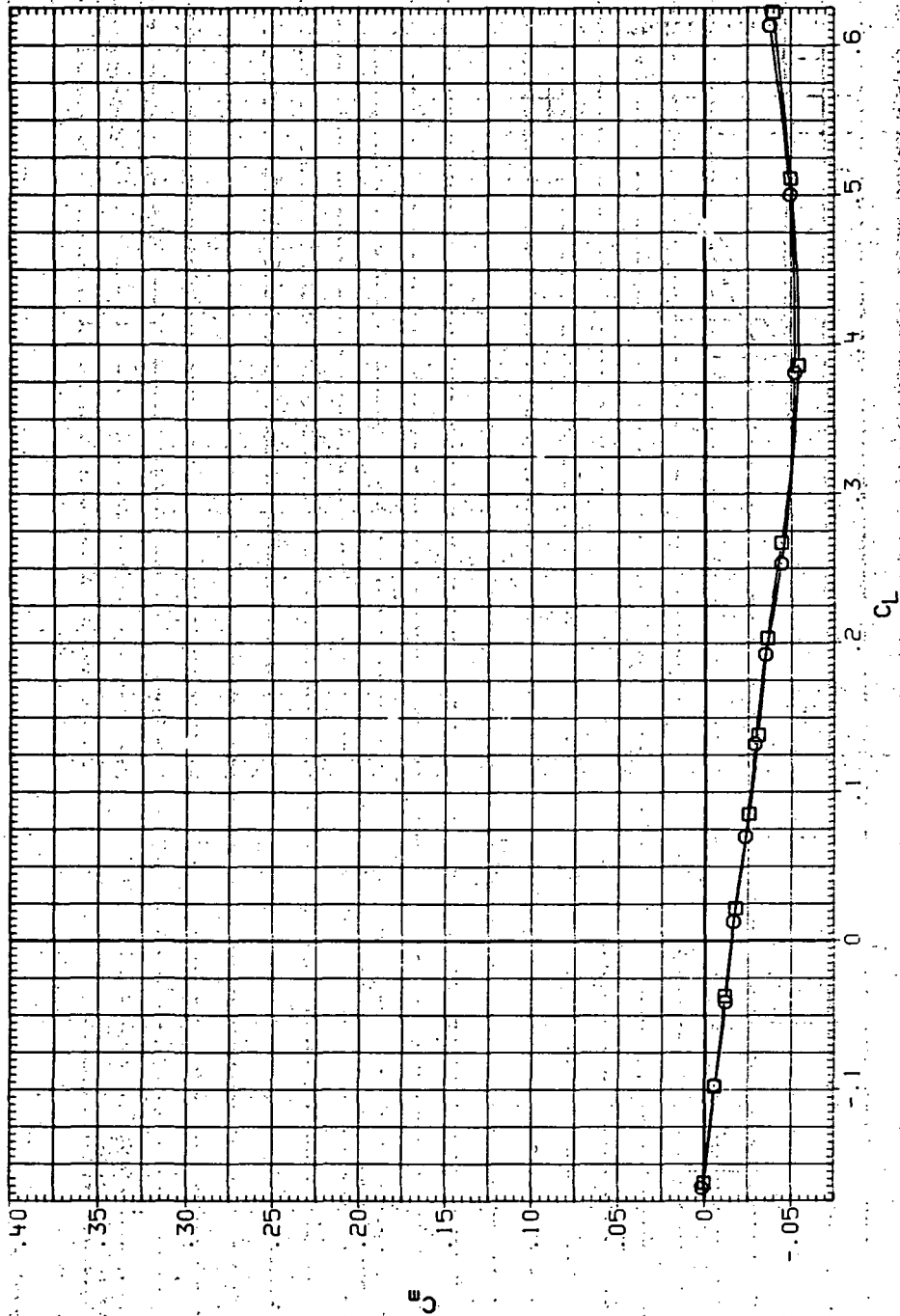


(b) C_D vs C_L .

Figure 90.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJC259 ○ 8W58 (STEEL)
 RJC258 □ 8W5E (STEEL)

RN/L
 6.230
 8.200

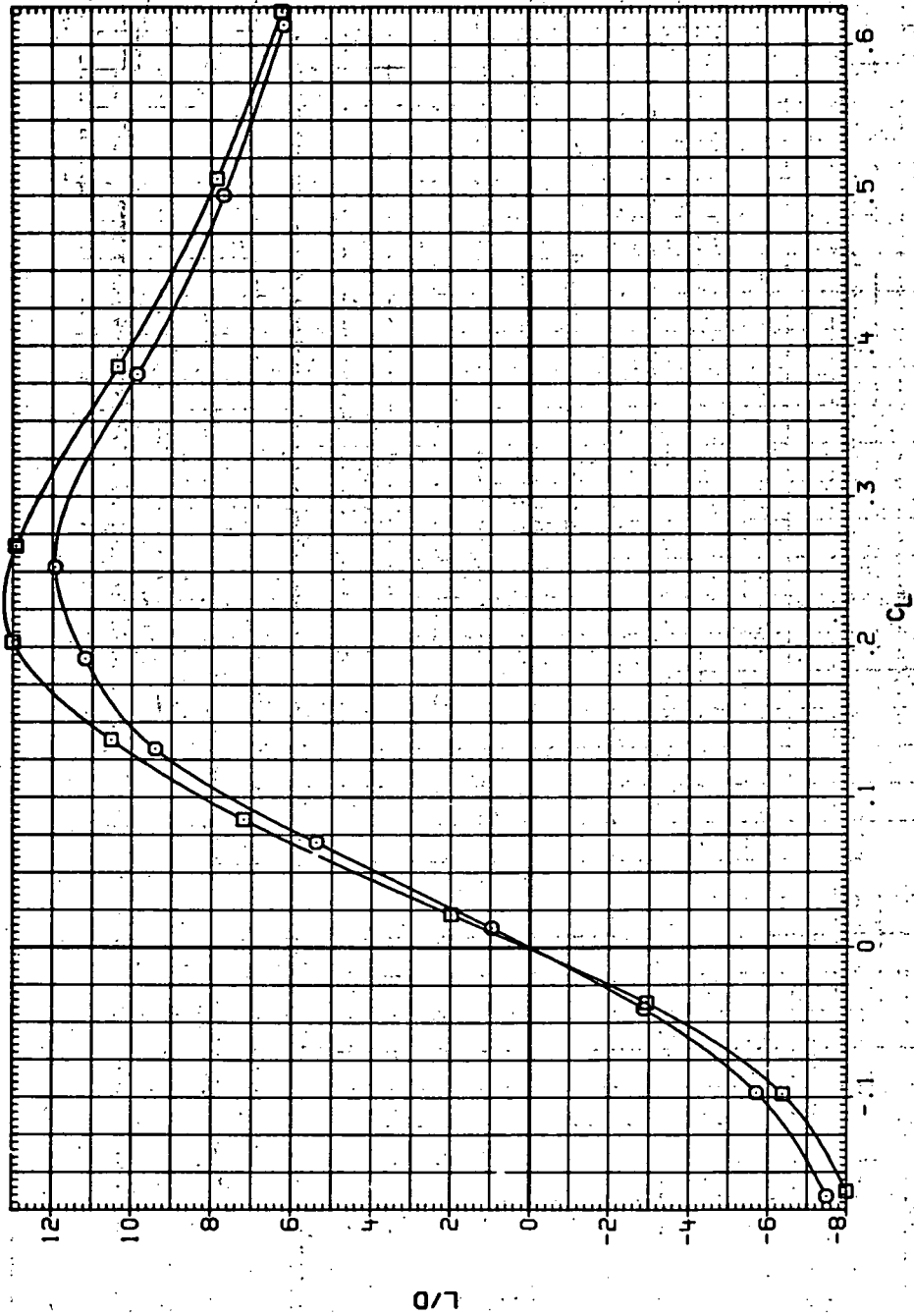


(c) C_m vs C_L .

Figure 90. — Continued.

DATA SET SYMBOL CONFIGURATION
 1 58 84-58 (STEEL)
 2 58 84-58 (STEEL)

RV/L
 30
 200

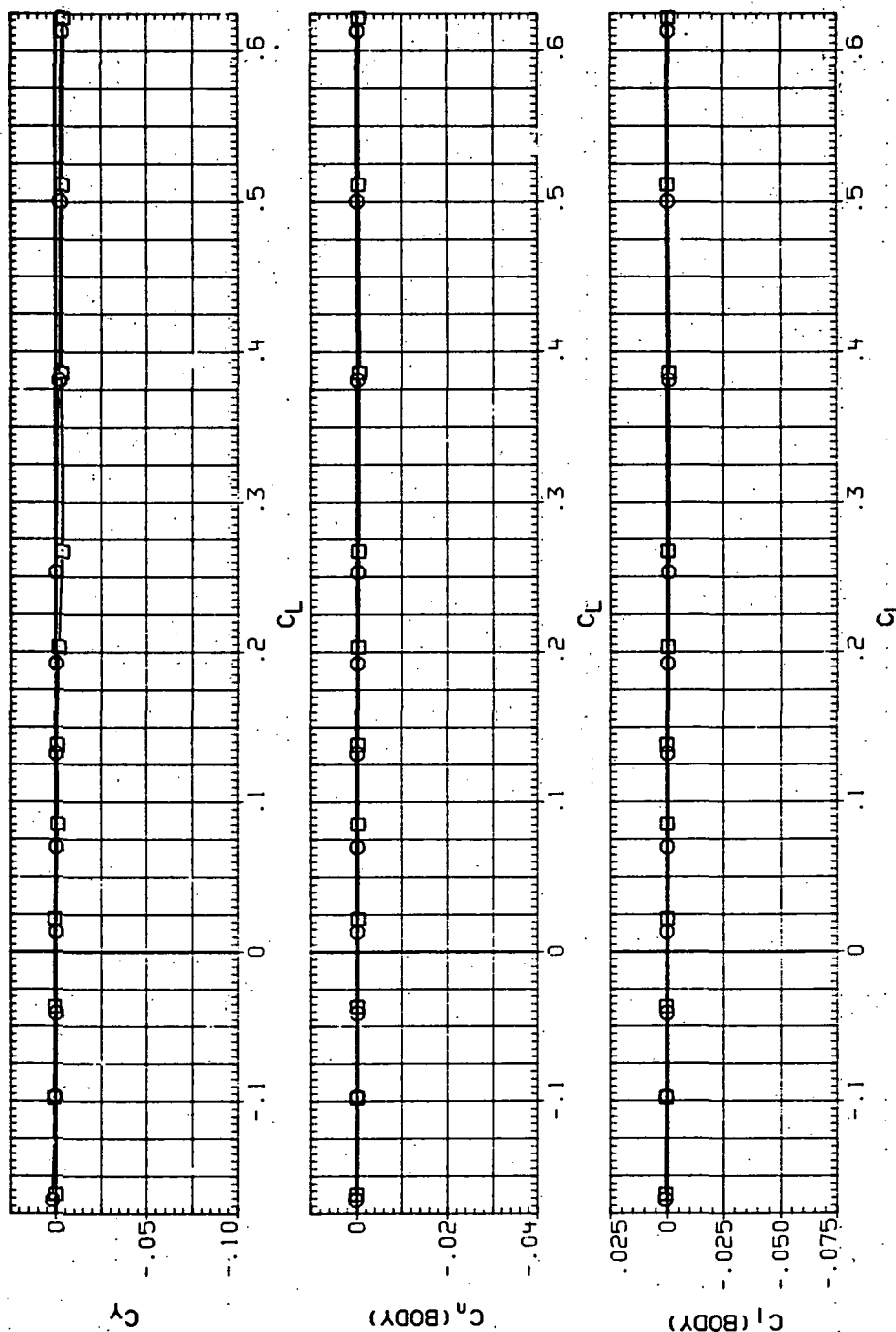


(d) L/D vs C_L .

Figure 90.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 8M-58 (STEEL)
 RJR258 8M-58 (STEEL)

RV/L
 6.230
 8.200

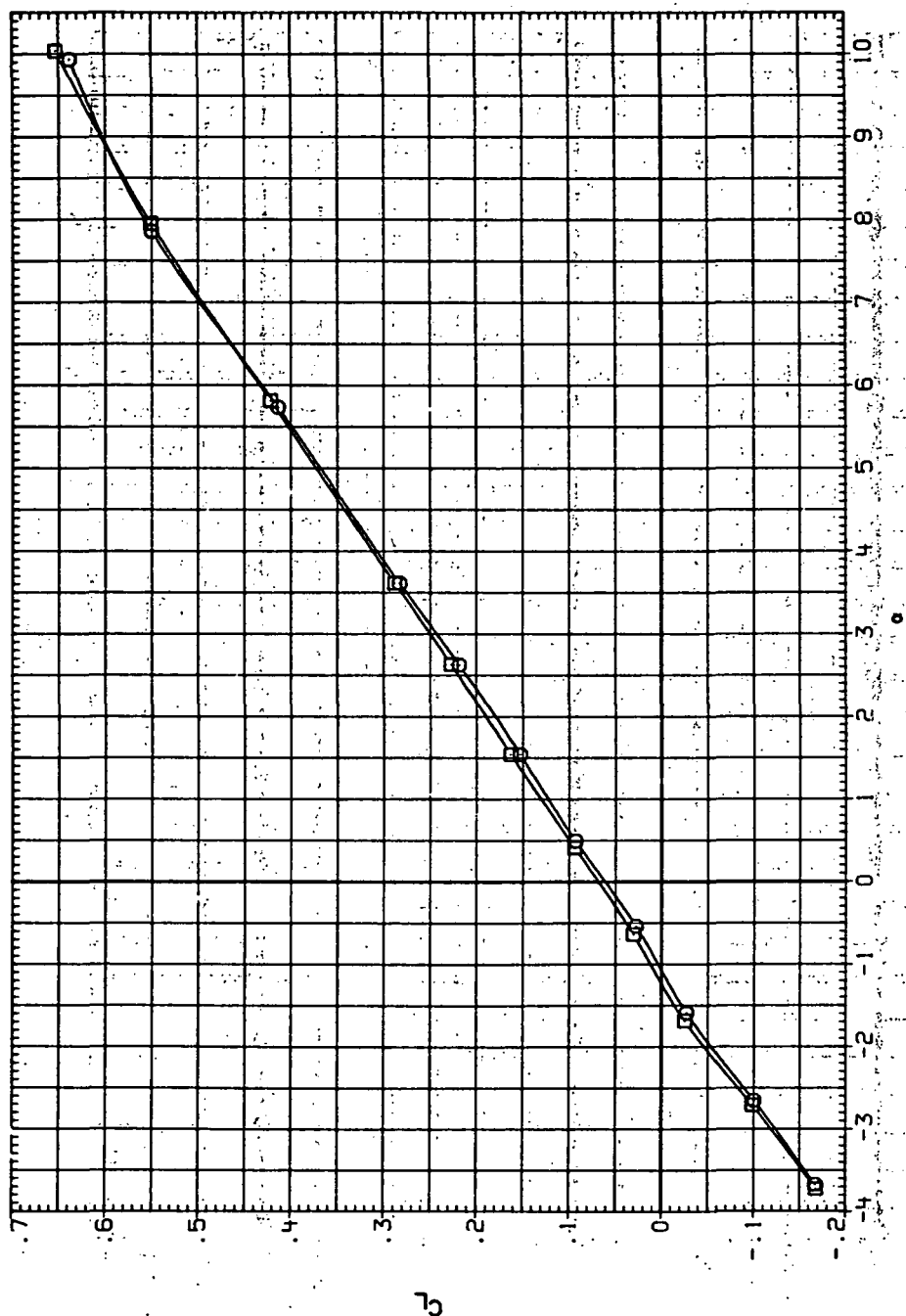


(e) C_Y , C_n and C_l vs C_L .

Figure 90.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR258 $\square$ 8A58 (STEEL)
 RJR258 $\circ$ 8A58 (STEEL)

RN/L
 6.230
 8.200

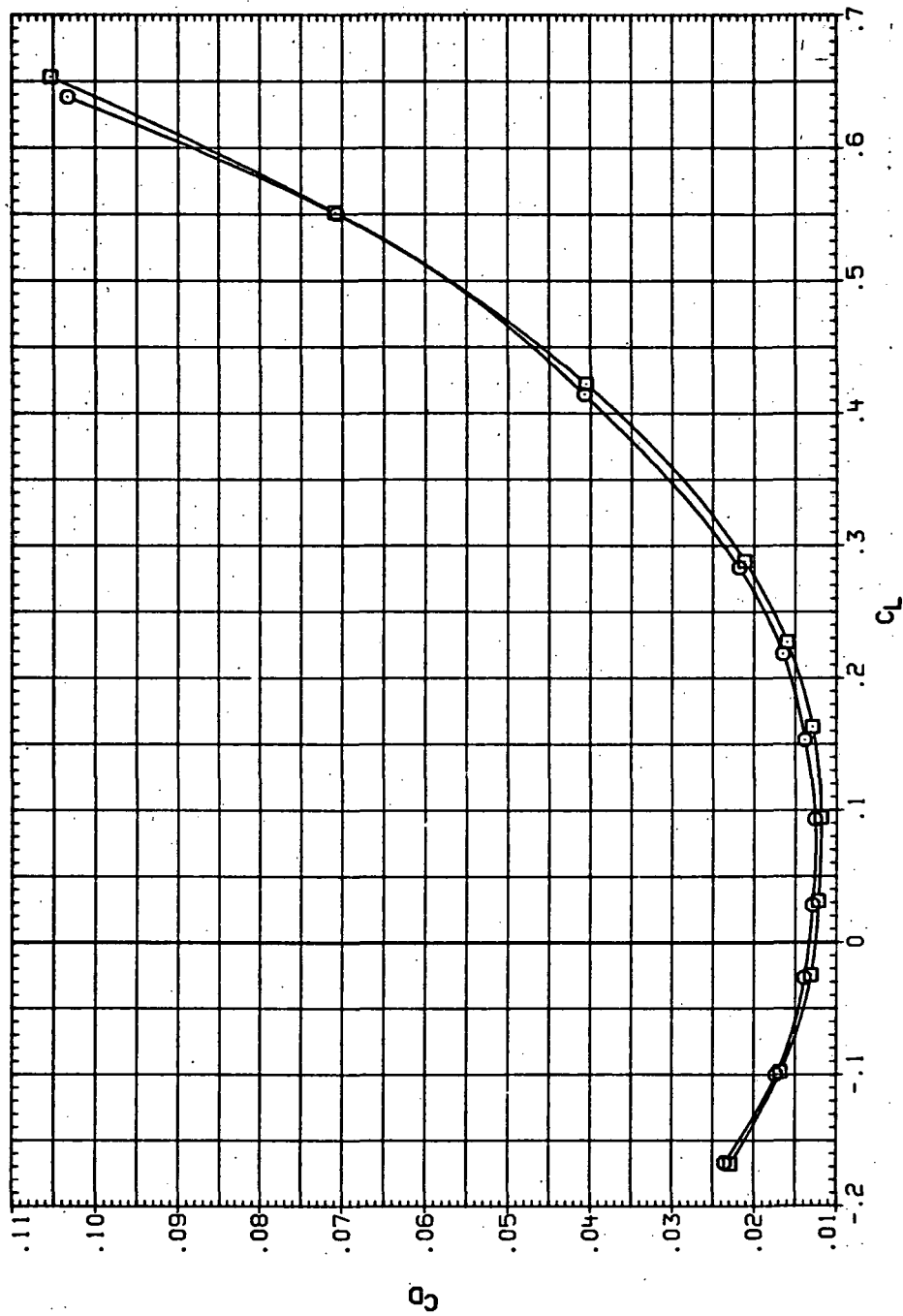


(a) C_L vs α .

Figure 91. — Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 0.6$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUR259 □ 8A+5B (STEEL)
 RUR258 □ 8A+5B (STEEL)

RM/L
 8.230
 8.200

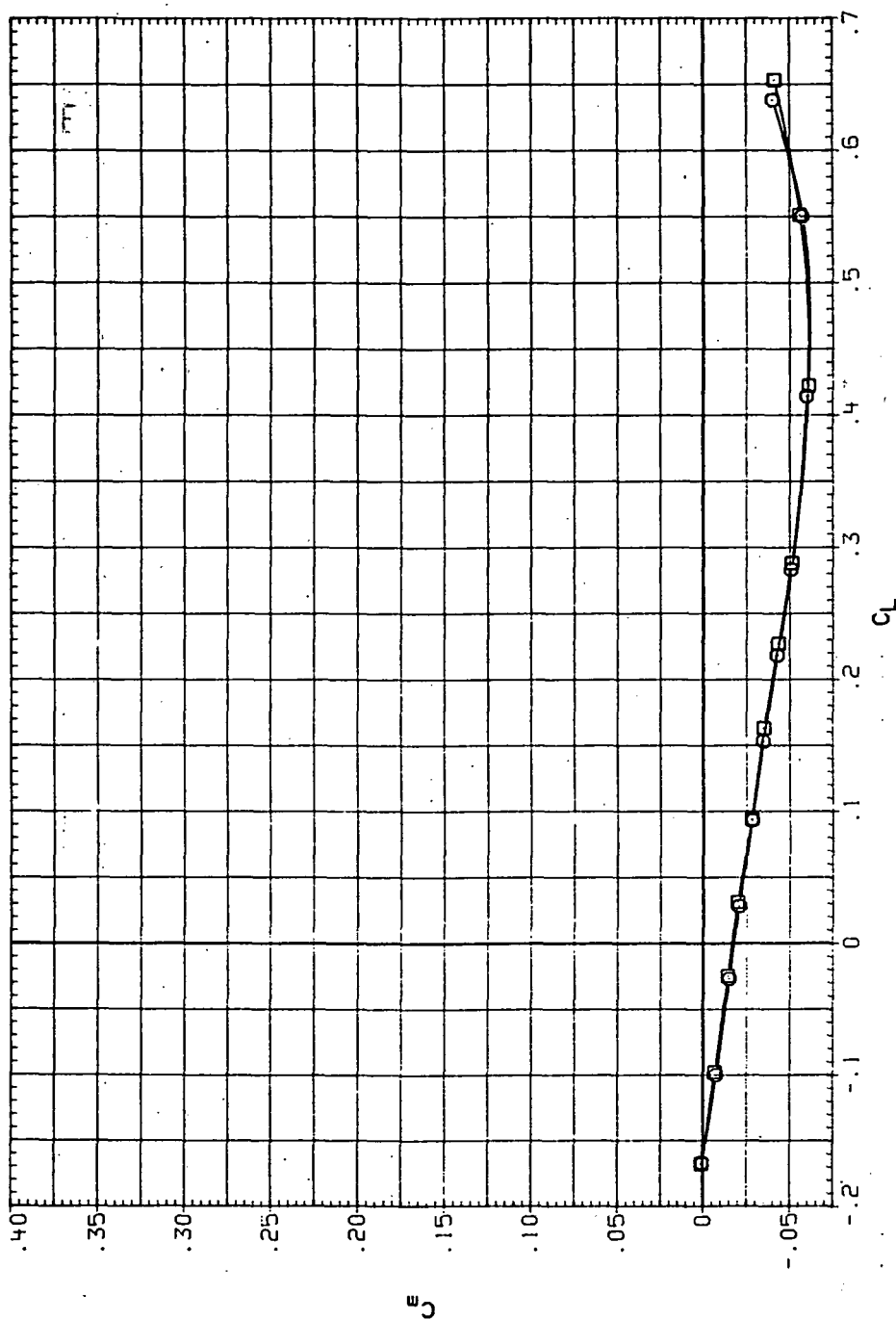


(b) C_D vs C_L .

Figure 91.— Continued.

DATA SET SYMBOL . CONFIGURATION
 RJR259 ○ 8M58 (STEEL)
 RJR296 □ 8M58 (STEEL)

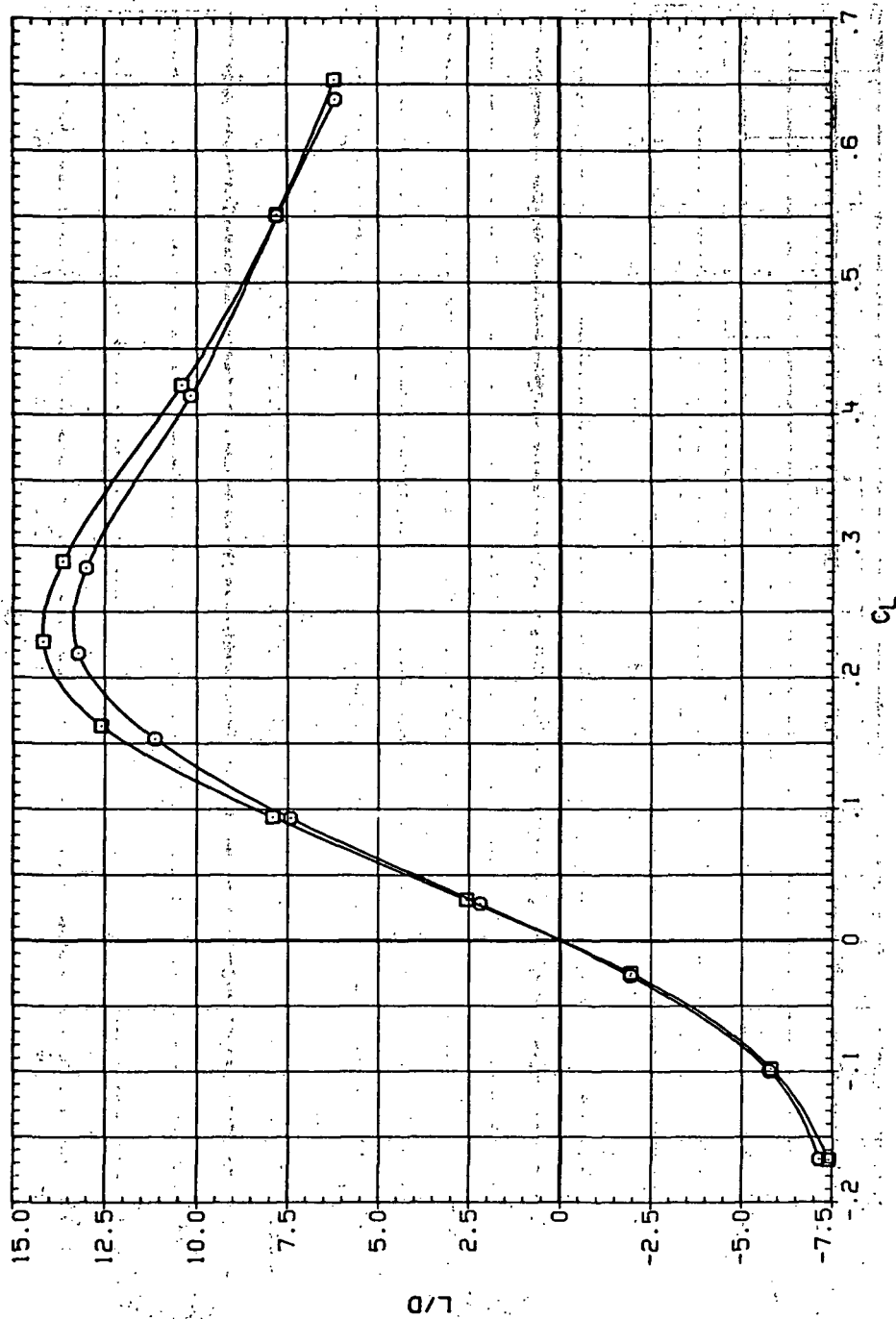
RN/L
 6.230
 8.200



(c) C_m vs C_L .

Figure 91.— Continued.

DA. SET SYMBOL CONFIGURATION
 RUR259 ○ 8M58 (STEEL)
 RUR258 □ 8M58 (STEEL)

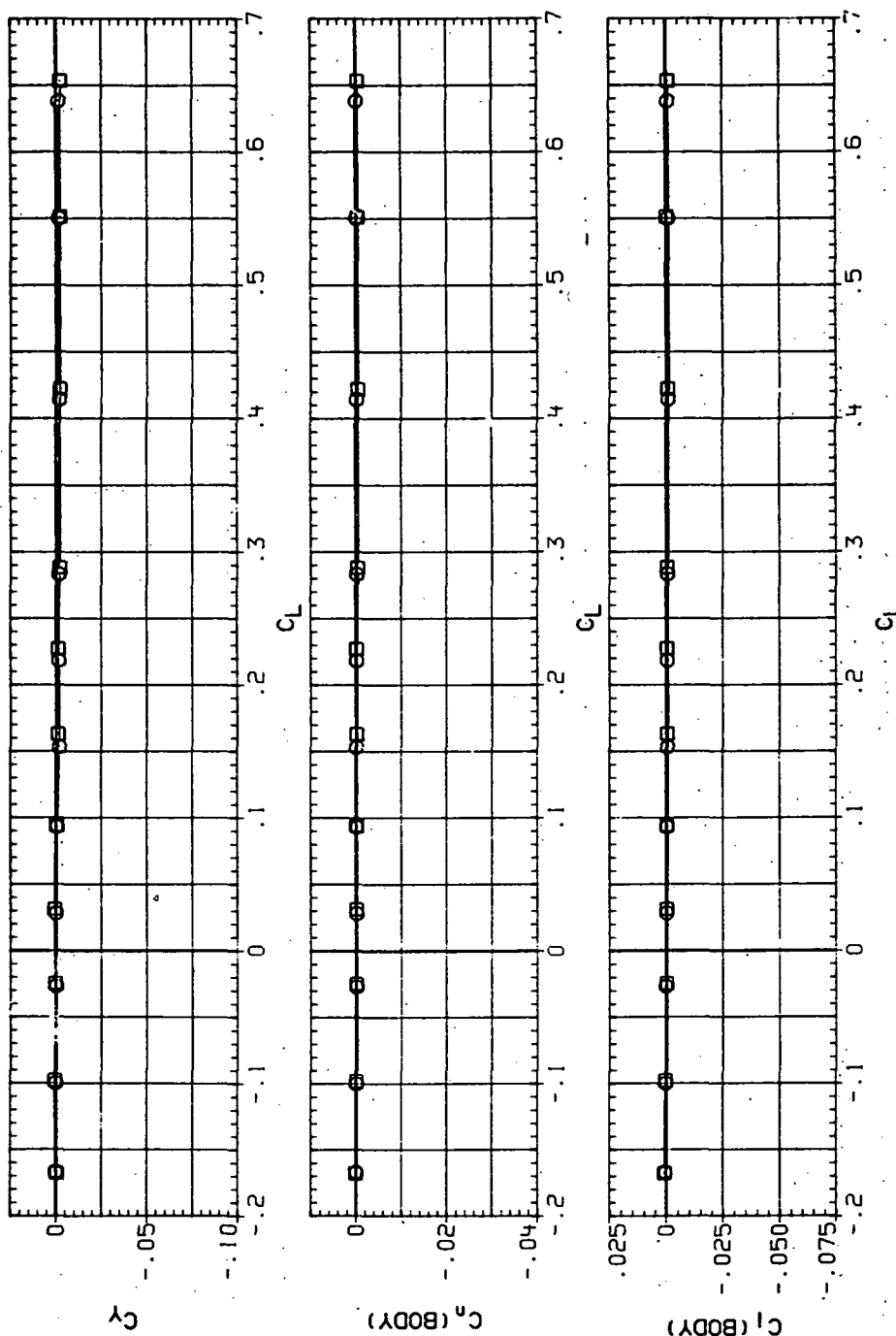


(d) L/D vs C_L

Figure 91.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 8H-58 (STEEL)
 RJR258 8H-58 (STEEL)

RN/L
 6.230
 8.200



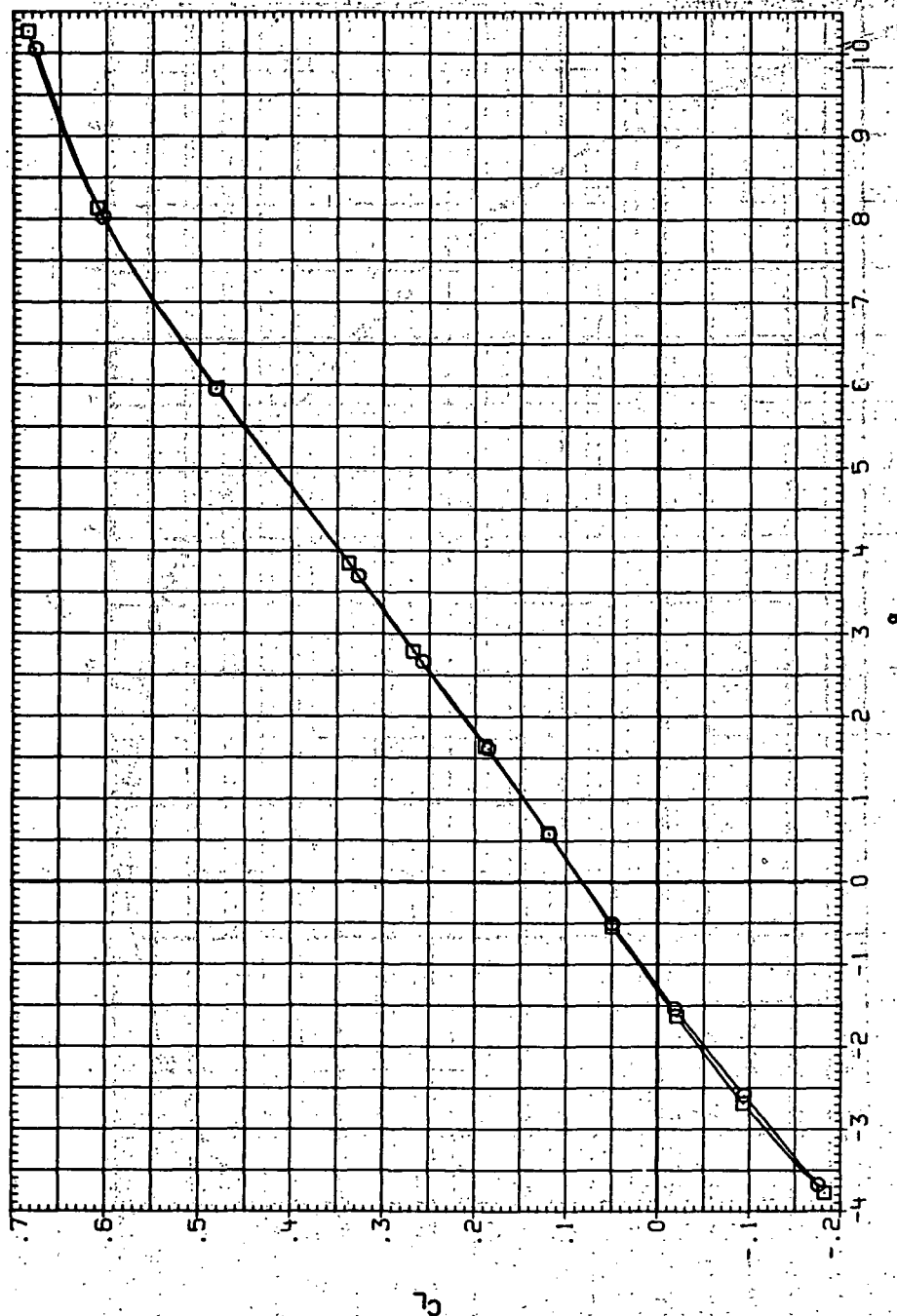
(e) C_Y , C_n and C_l vs C_L .

Figure 91.- Concluded.

DATA SET SYMBOL CONFIGURATION
 R JB 845B (STEEL)
 RJC5B 845B (STEEL)

RM 11
 6.200

1000000

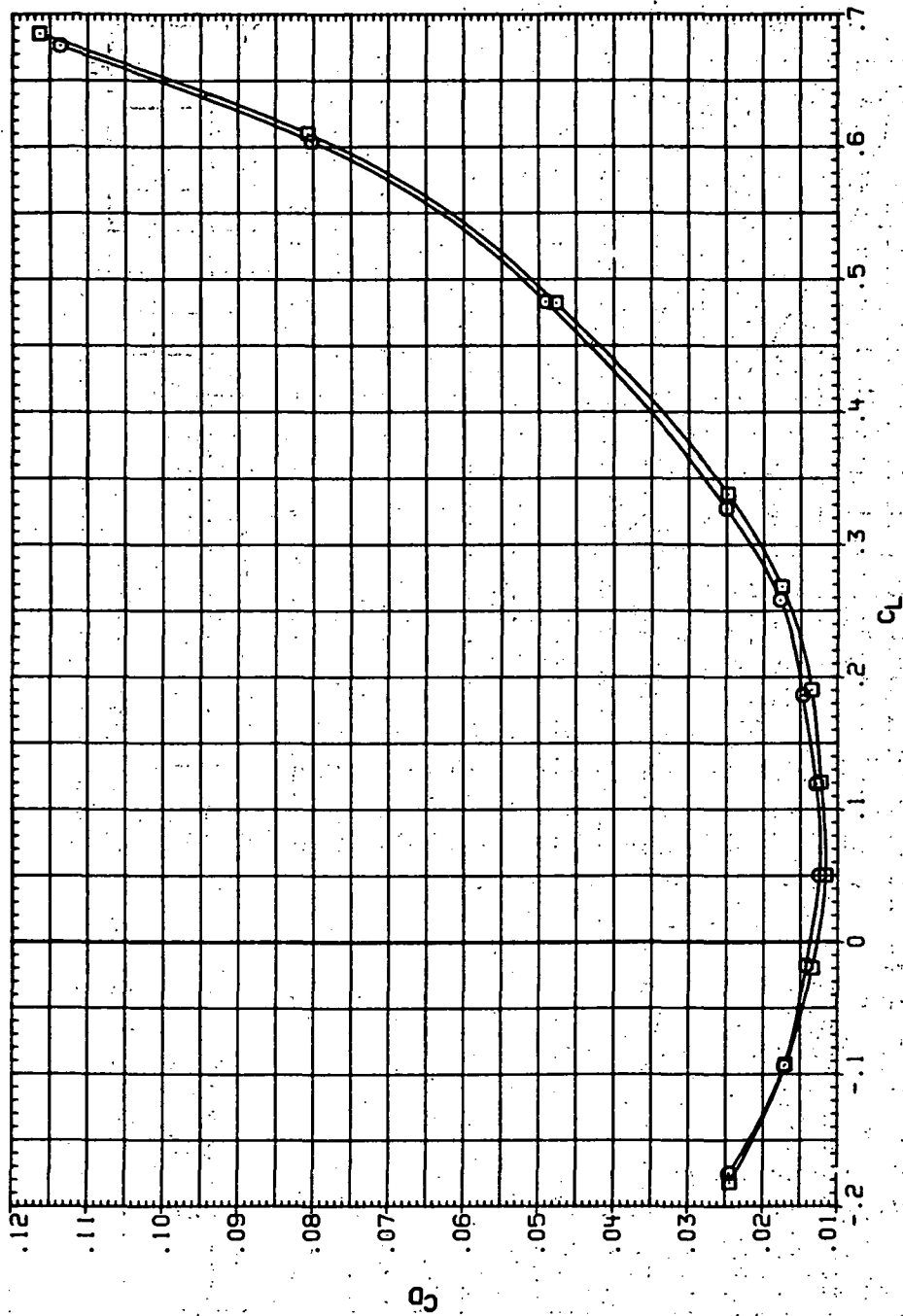


(a) C_L vs α .

Figure 92.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 0.8$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUP258  8A/58 (STEEL)
 RUP258  8A/58 (STEEL)

RV/L
 8.230
 8.200

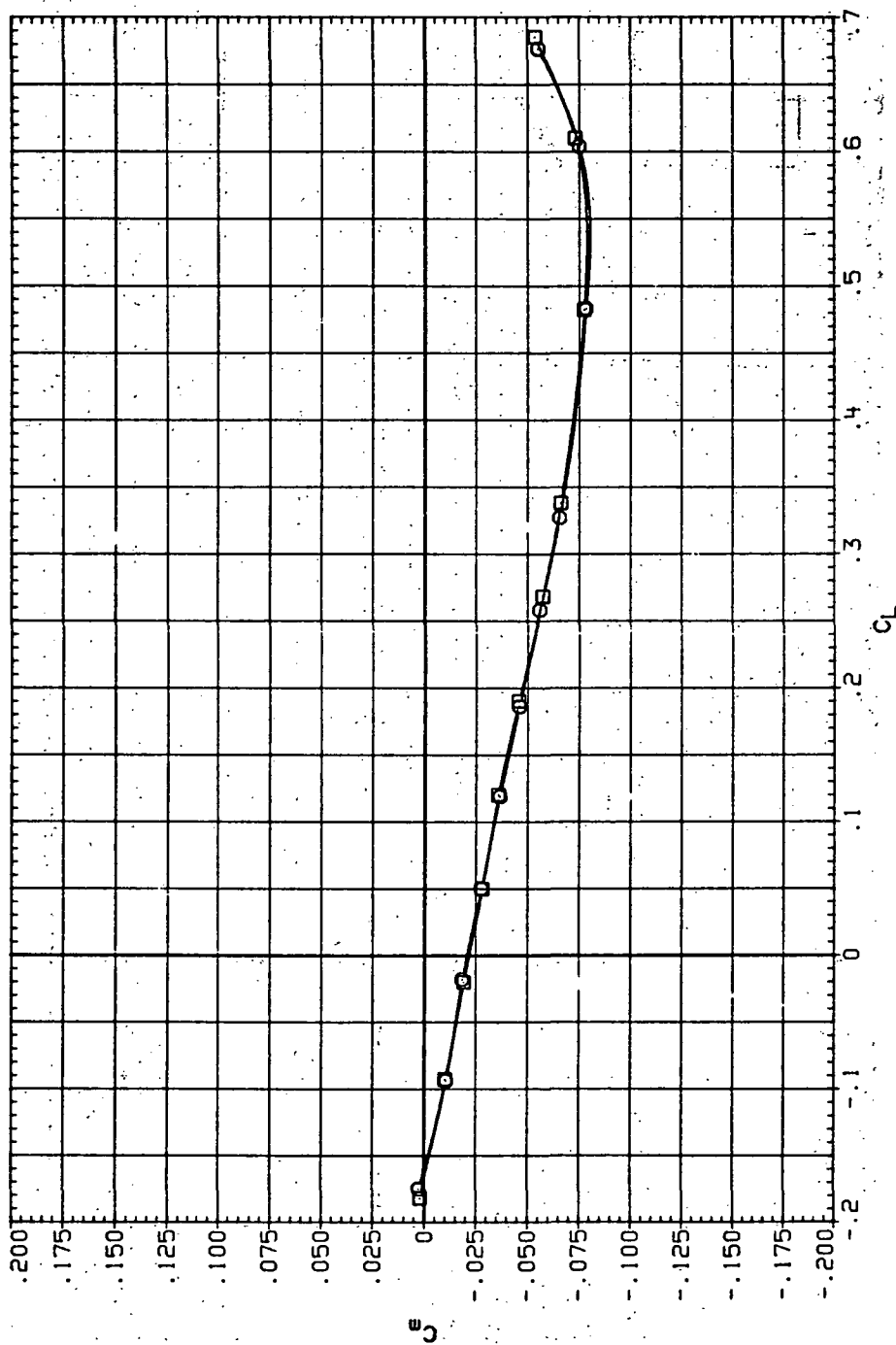


(b) C_D vs C_L .

Figure 92.- Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 ○ 84458 (STEEL)
 RJR258 □ 84458 (STEEL)

RN/L
 6.230
 8.200

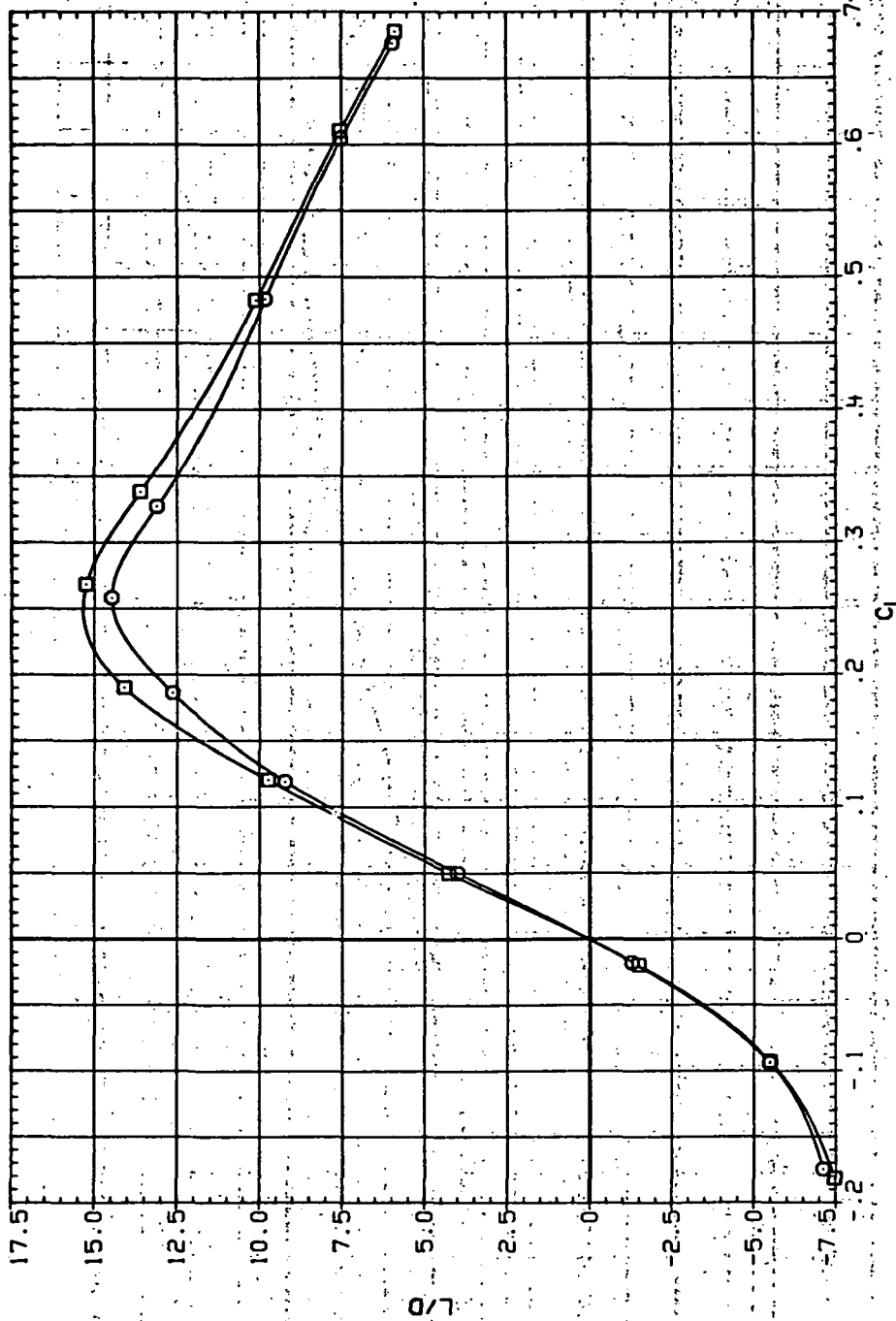


(c) C_m vs C_L

Figure 92.— Continued.

DATA SET SYMBOL CONFIGURATION
 R/R259 □ 8445B (STEEL)
 R/R258 □ 8445B (STEEL)

RN/L
 8.230
 8.200

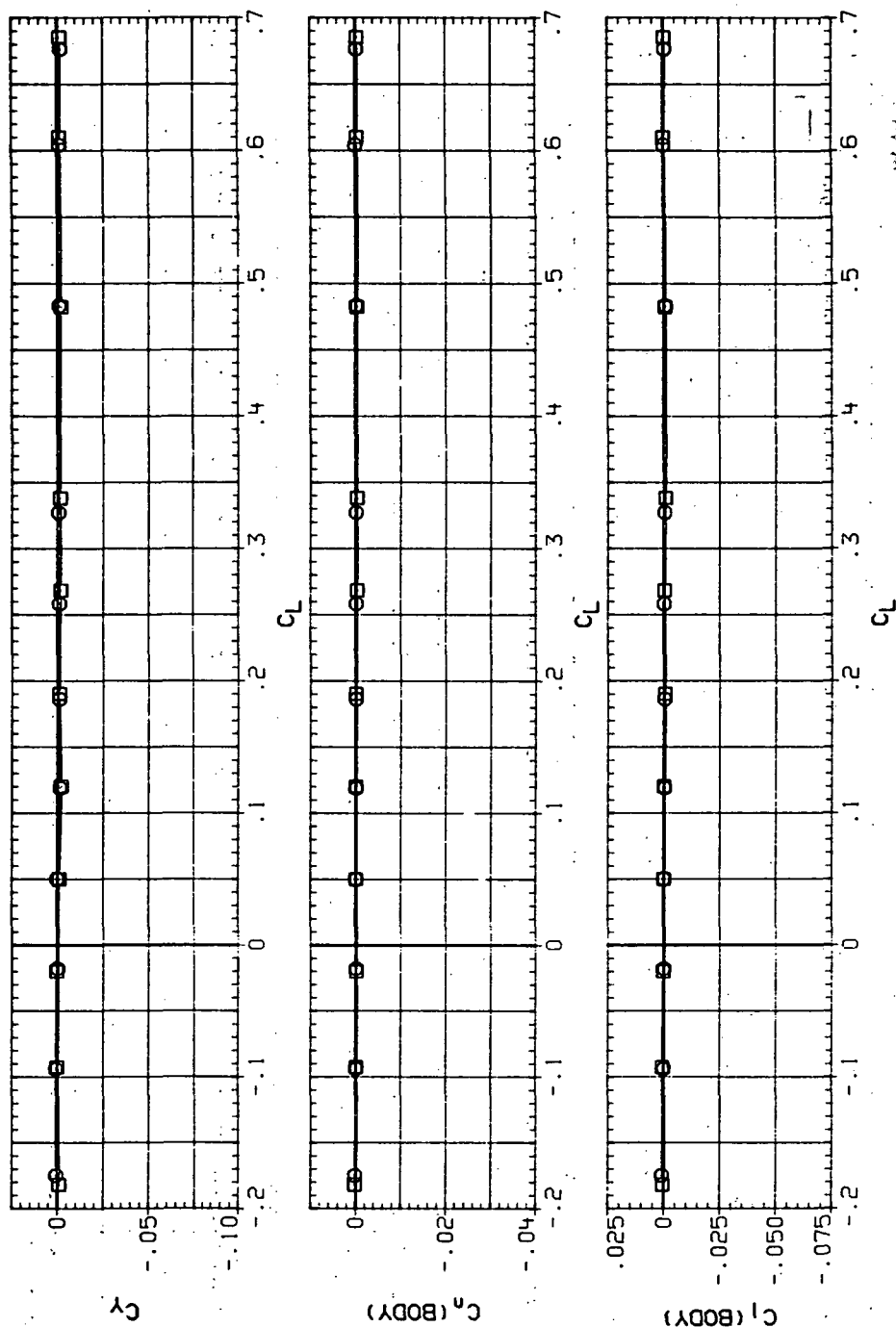


(d) L/D vs C_L .

Figure 92.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR559 $\square$ 8M45B (STEEL)
 RJR558 $\square$ 8M45B (STEEL)

RV/L
 6.230
 8.200

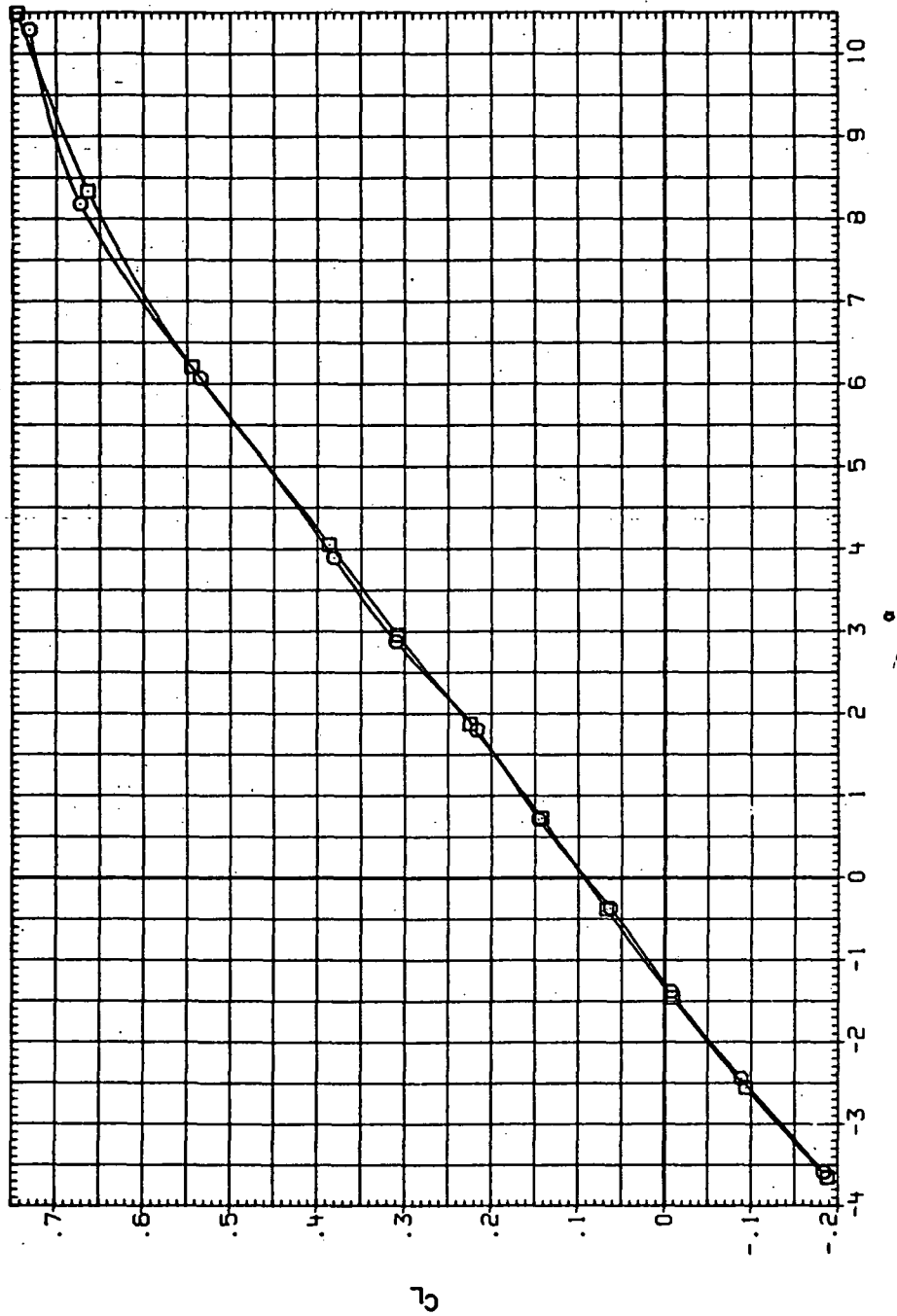


(e) C_Y , C_n and C_l vs C_L .

Figure 92.— Concluded.

DA... SET SYMBOL CONFIGURATION
 RJR259 8A:59 (STEEL)
 RJR258 8A:59 (STEEL)

R 8.230
 8.200

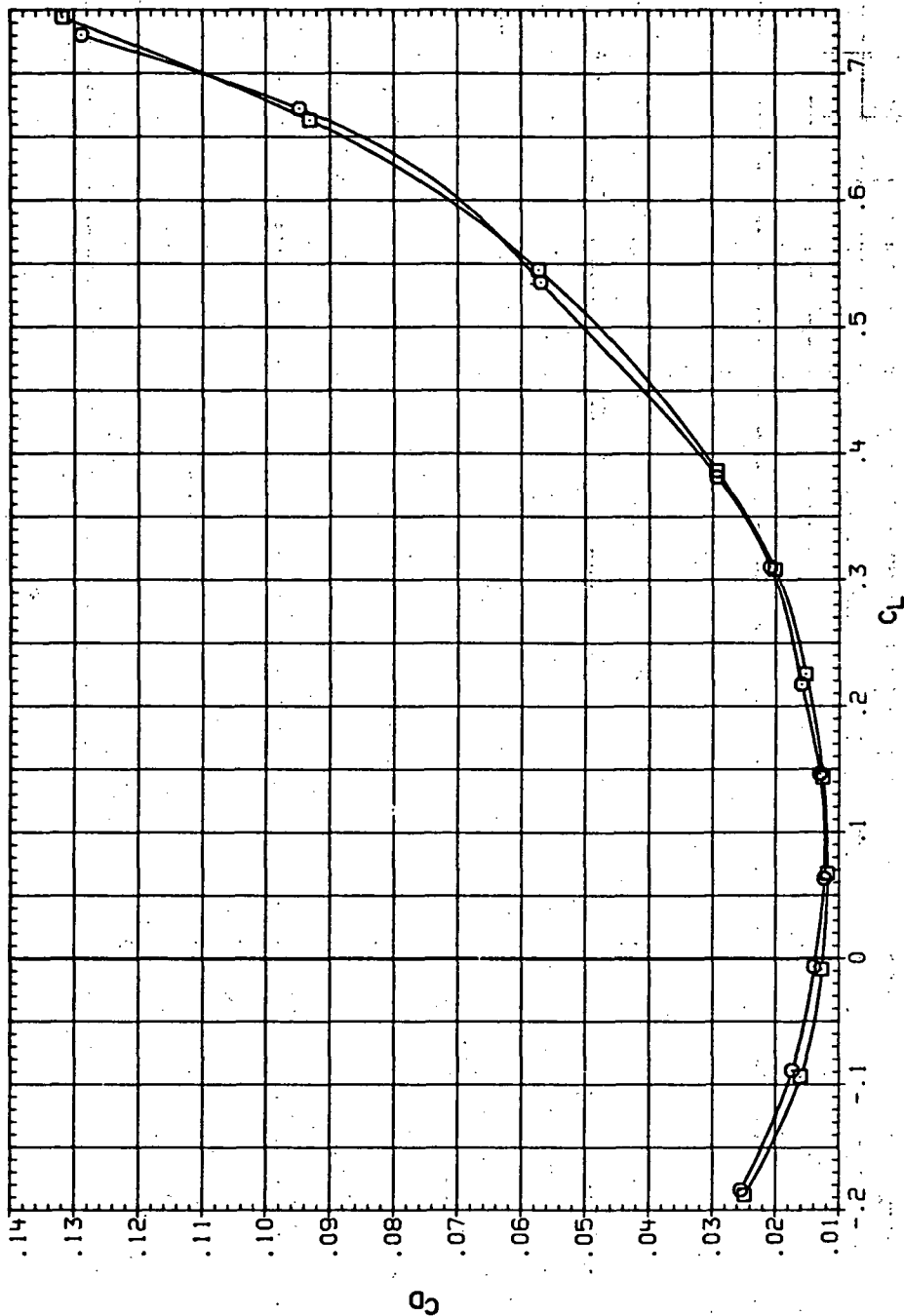


(a) C_L vs α .

Figure 93.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 0.9$ and the NACA 65A204 airfoil).

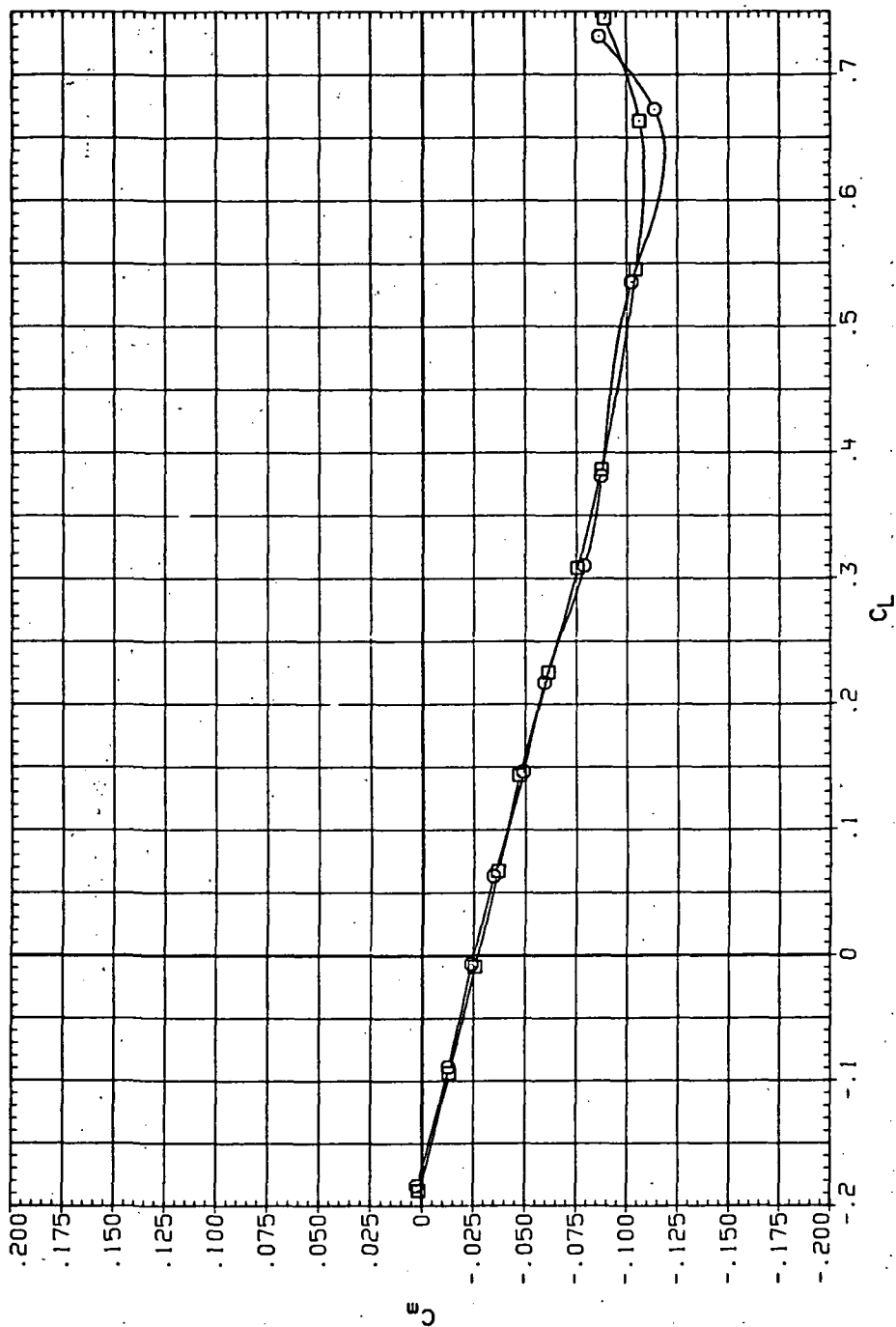
DA ET SYMBOL CONFIGURATION
 RUM258 8M5B (STEEL)
 RUM258 8M5B (STEEL)

R
 6.50
 8.200



DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ 8W58 (STEEL)
 RJR258 $\square$ 8W58 (STEEL)

RN/L
 6.230
 8.200

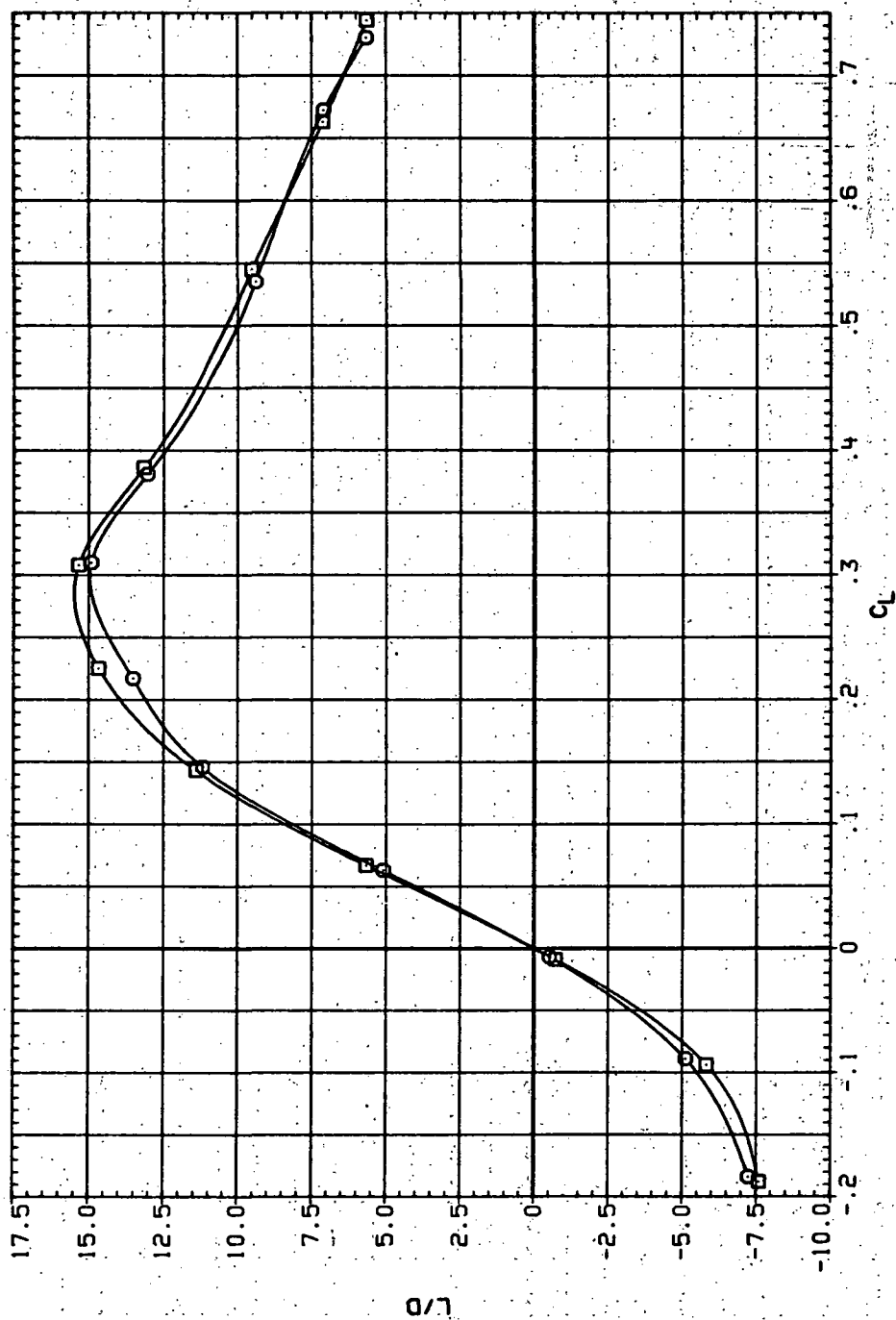


(c) C_m vs C_L .

Figure 93.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP258 ○ 8W58 (STEEL)
 RUP258 □ 8W58 (STEEL)

RN/L
 8.230
 8.200

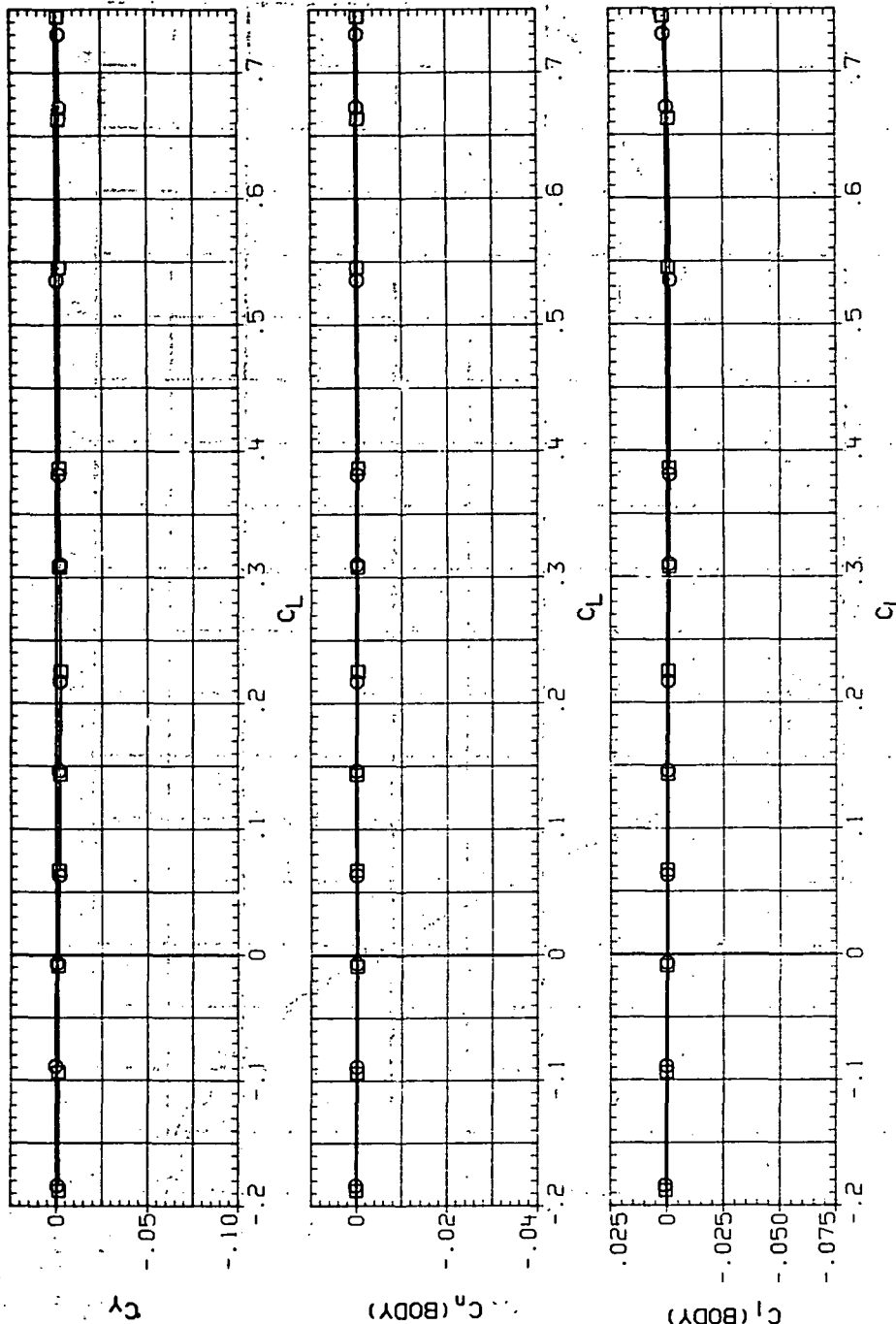


(d) L/D vs C_L .

Figure 93.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 8A458 (STEEL)
 RJR258 8A458 (STEEL)

RN/L
 6.230
 8.200

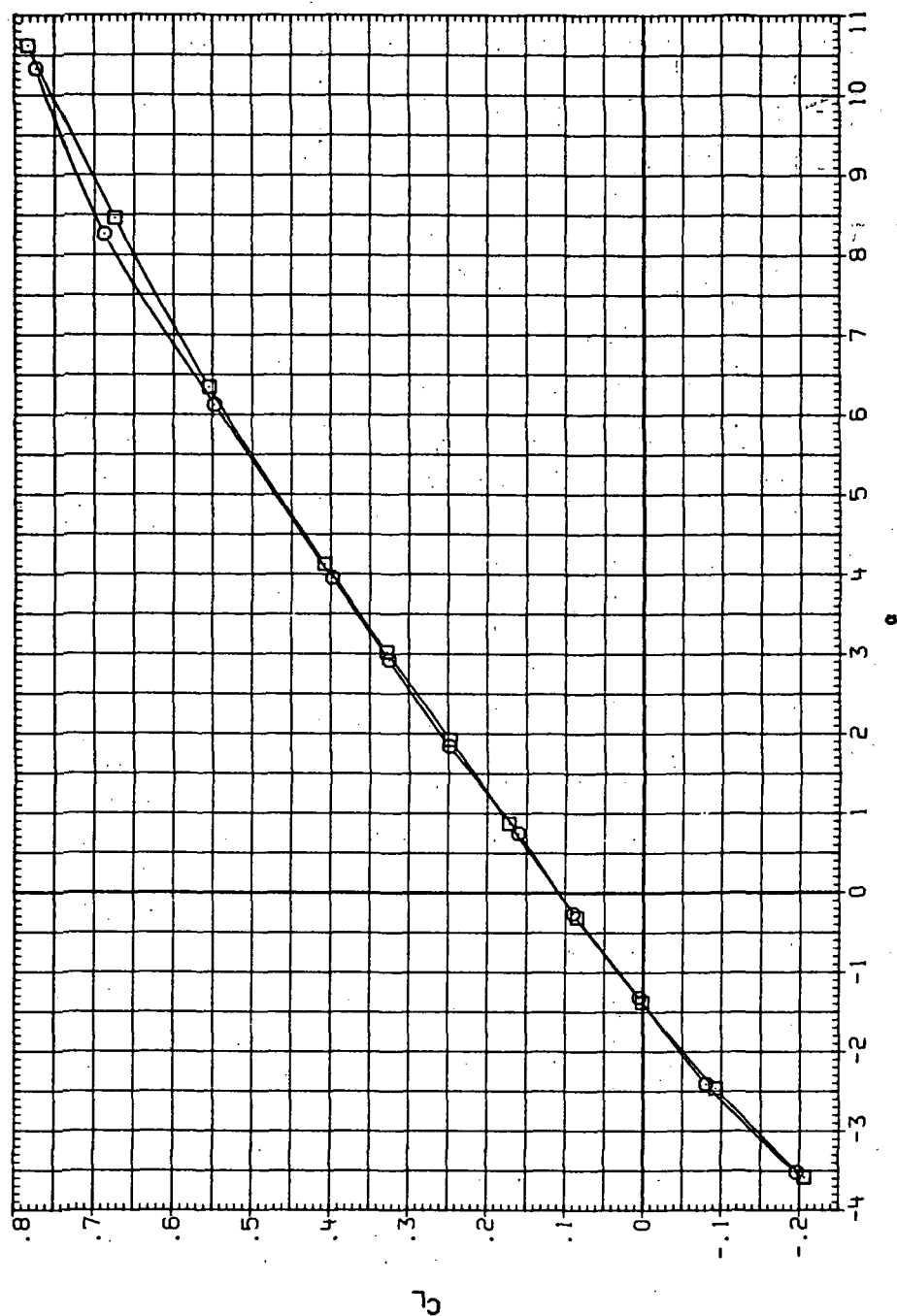


(e) C_Y , C_n and C_l vs C_L .

Figure 93.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR258 ○ 84A58 (STEEL)
 RJR258 □ 84A58 (STEEL)

Re/L
 6.230
 8.200

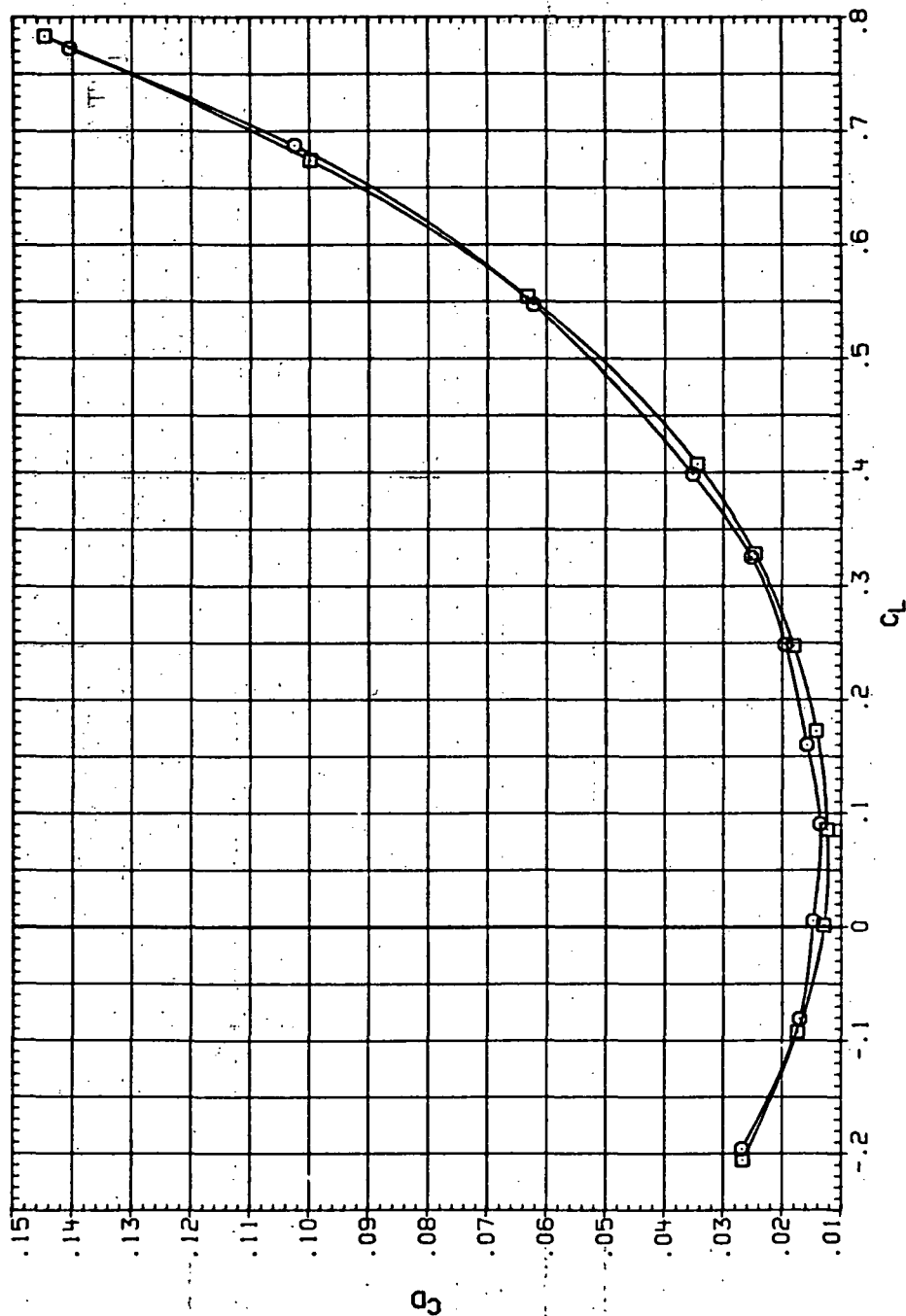


(a) C_L vs α .

Figure 94.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 0.95$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR259 84458 (STEEL)
 RJR258 84458 (STEEL)

RV/L
 6.230
 8.200

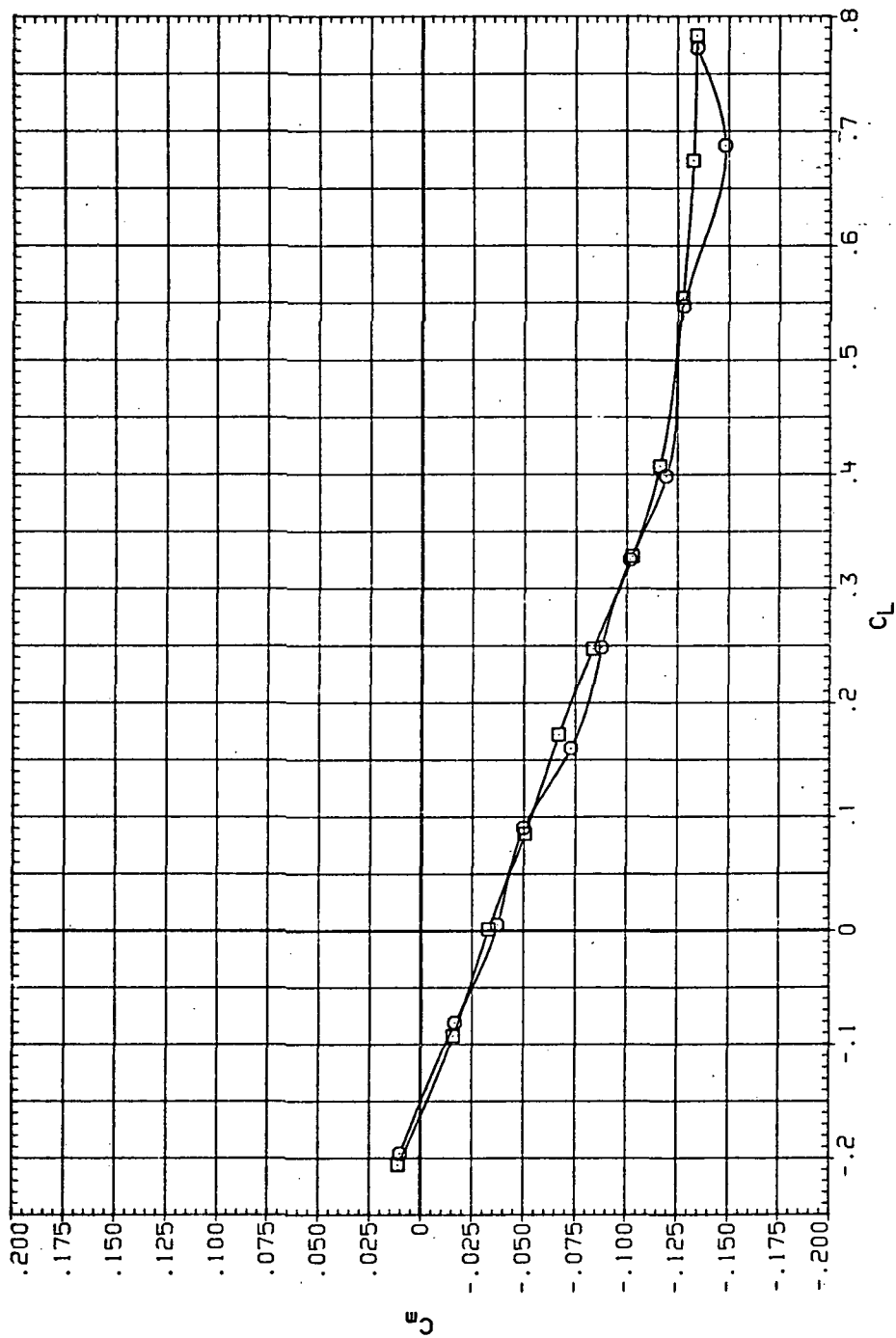


(b) C_D vs C_L .

Figure 94. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUP259 ○ 8H45B (STEEL)
 RUP258 □ 8H45B (STEEL)

RN/L
 6.230
 8.500

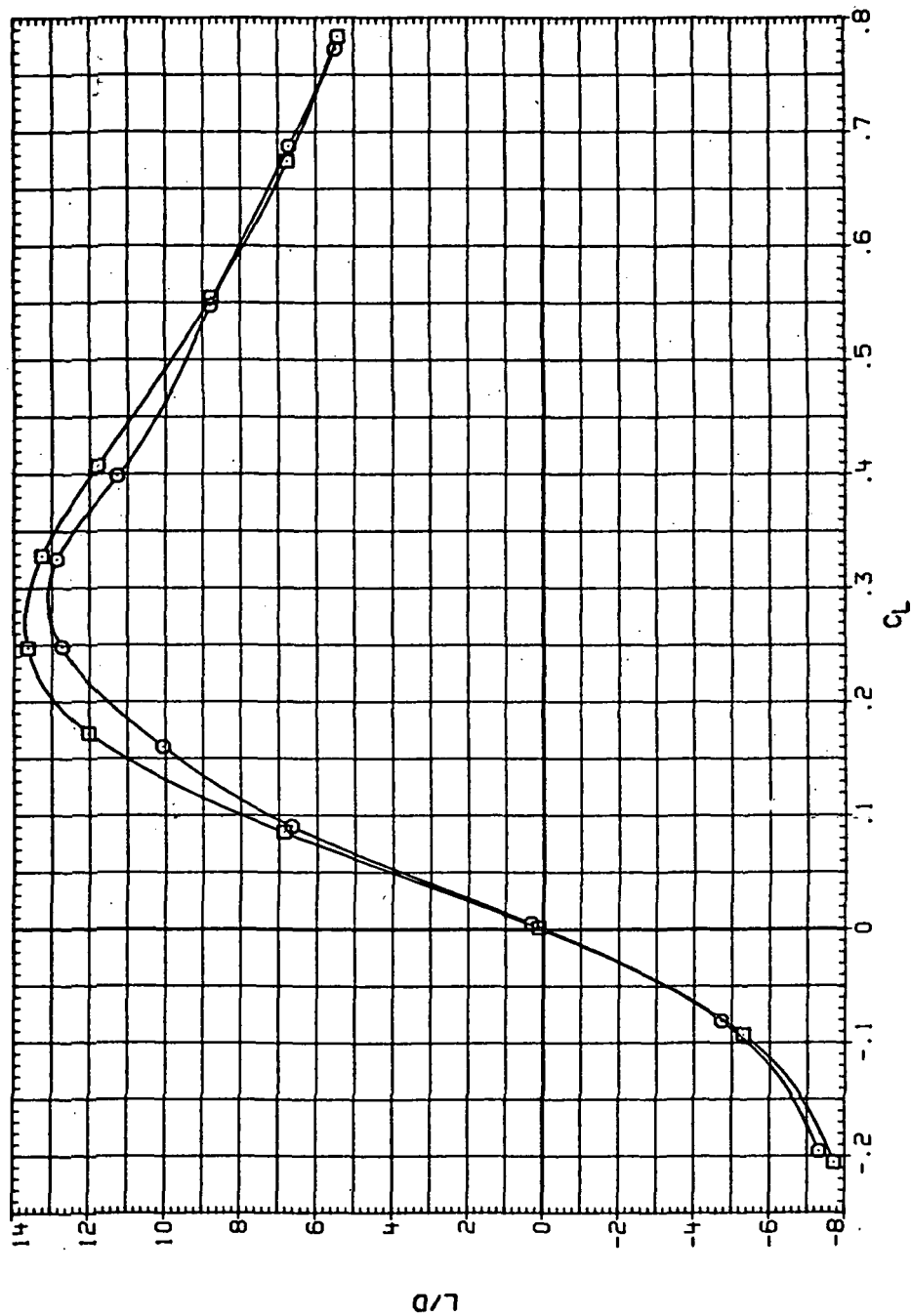


(c) C_m vs C_L .

Figure 94.— Continued.

DAT T SYMBOL CONFIGURATION
 R.JR258 $\square$ BA-58 (STEEL)
 R.JR258 $\circ$ BA-58 (STEEL)

RR
 8.450
 8.200

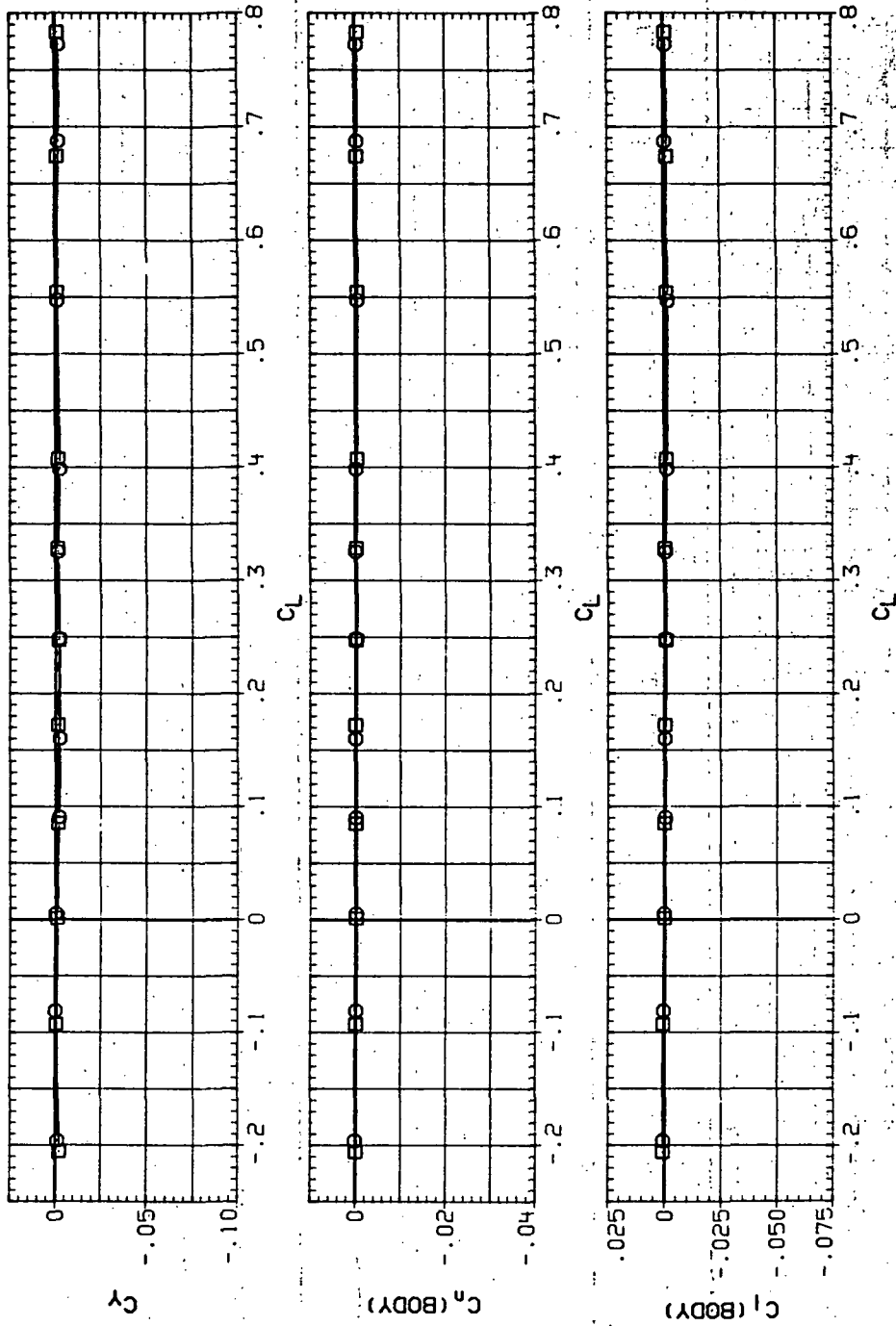


(d) L/D vs C_L .

Figure 94.— Continued.

DATA SET SYMBOL CONF IGURATION
 RJR259 $\square$ 8M45B (STEEL)
 RJR256 $\square$ 8M45B (STEEL)

RN/L
 6.230
 8.200

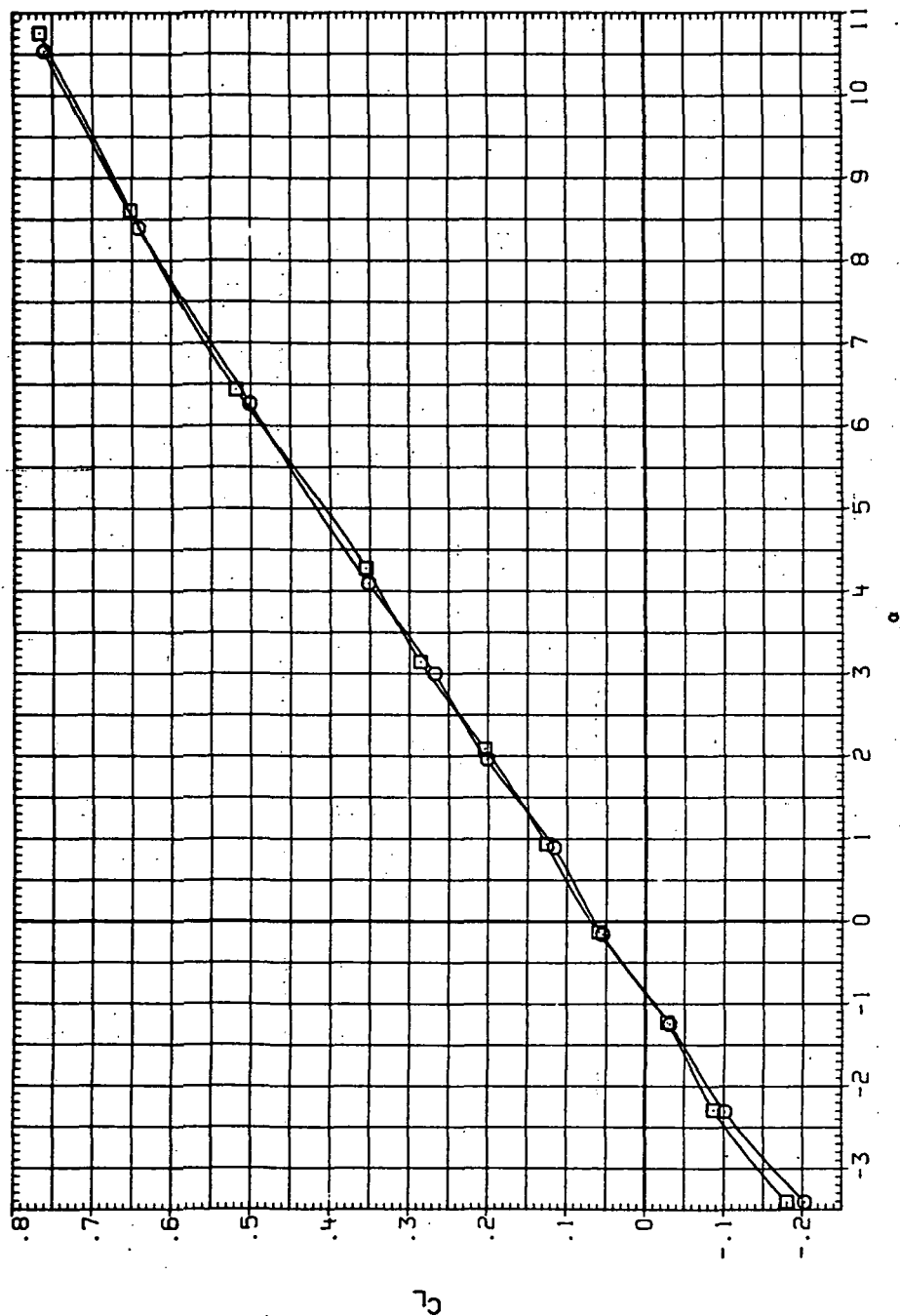


(e) C_Y , C_n and C_l vs C_L .

Figure 94.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR259 ○ 84A58 (STEEL)
 RJR258 □ 84A58 (STEEL)

RV/L
 6.230
 8.200

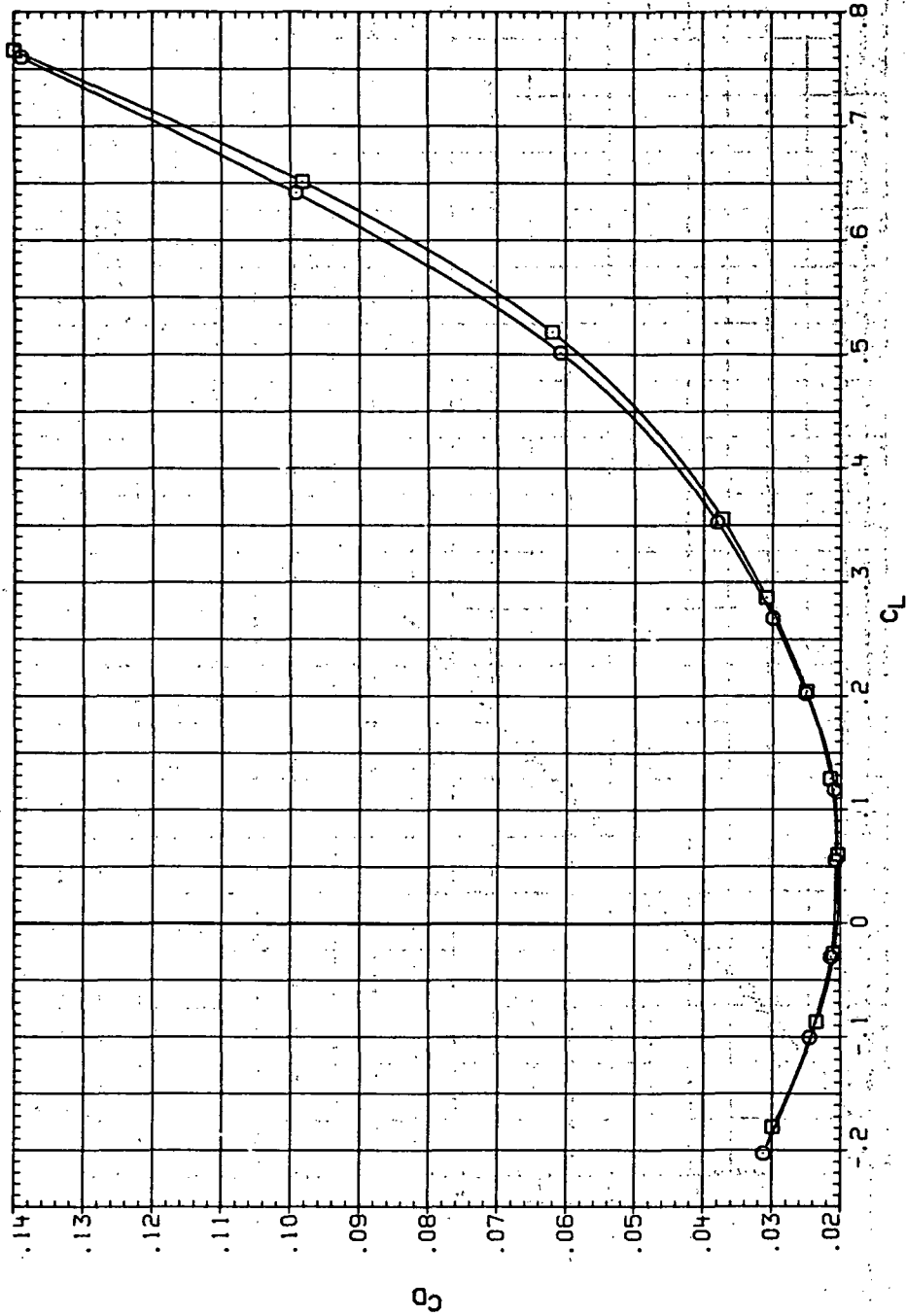


(a) C_L vs α .

Figure 95.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 1.1$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RUR258 ○ 8AHSB (STEEL)
 RUR258 □ 8AHSB (STEEL)

RN/L
 6.230
 8.200

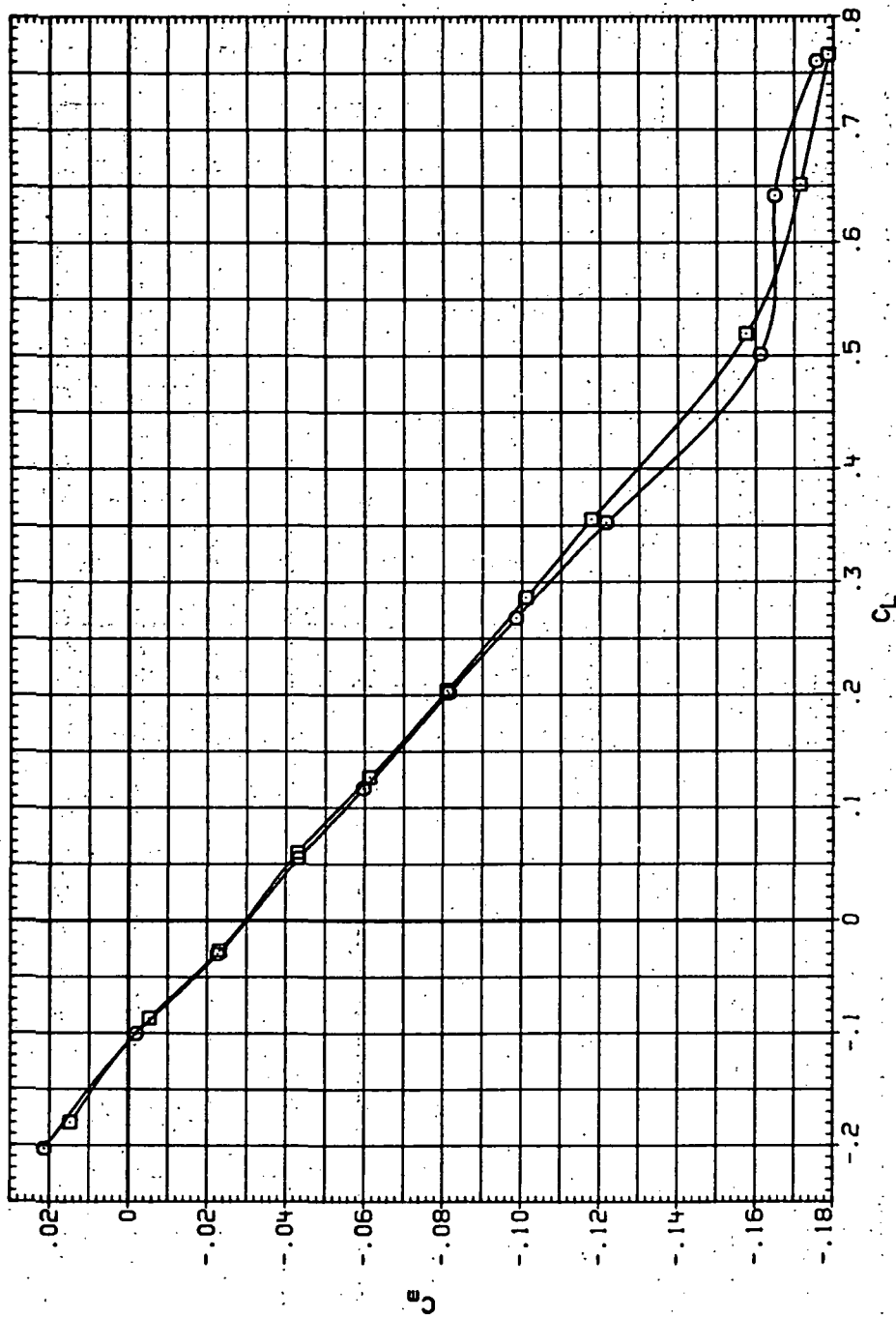


(b) C_D vs C_L .

Figure 95. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 ○ 8M/58 (STEEL)
 RJR258 □ 8M/58 (STEEL)

RN/L
 6.230
 6.200

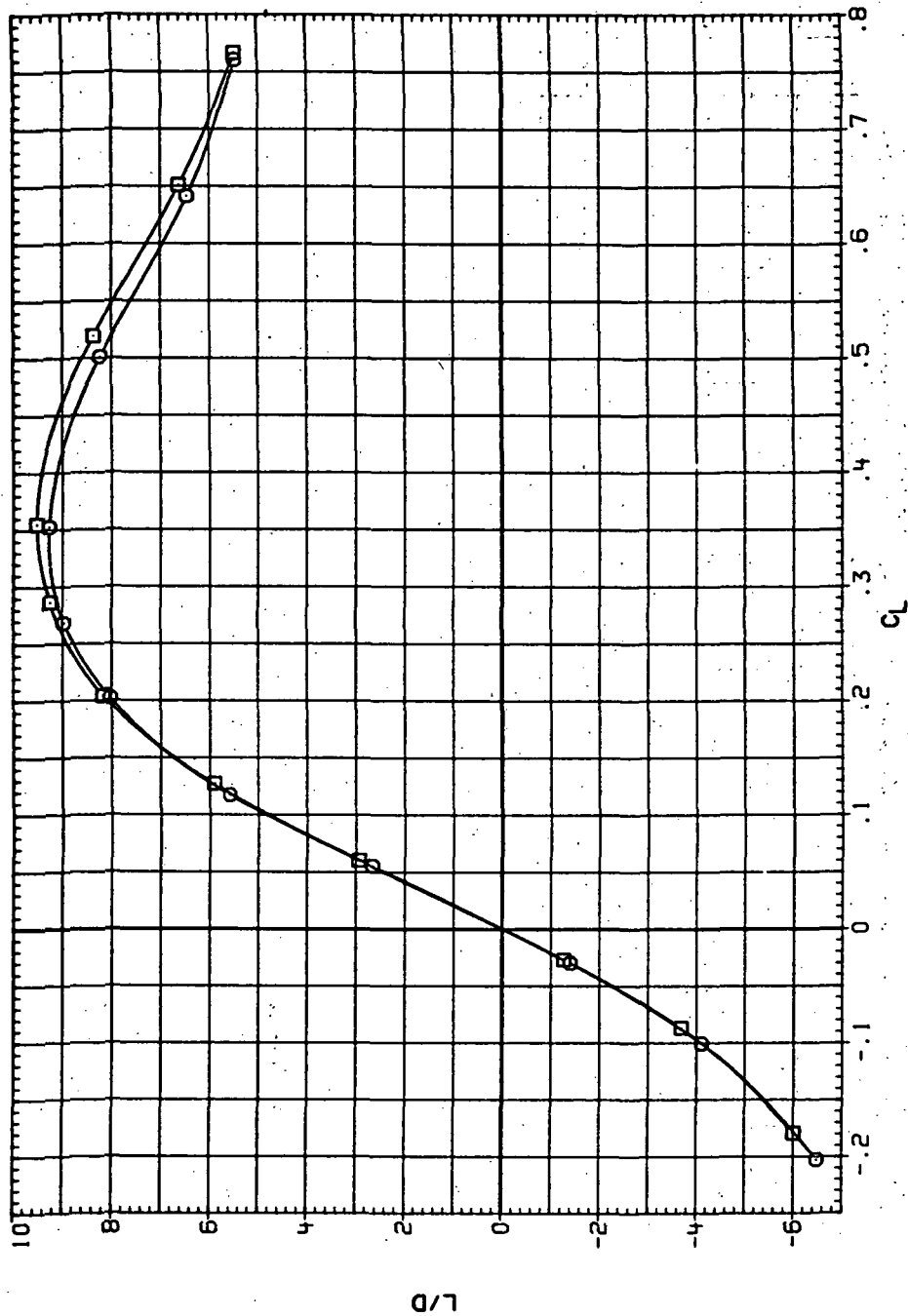


(c) C_m vs C_L

Figure 95.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ BM-59 (STEEL)
 RJR258 $\circ$ BM-58 (STEEL)

RV/L
 6.230
 8.200

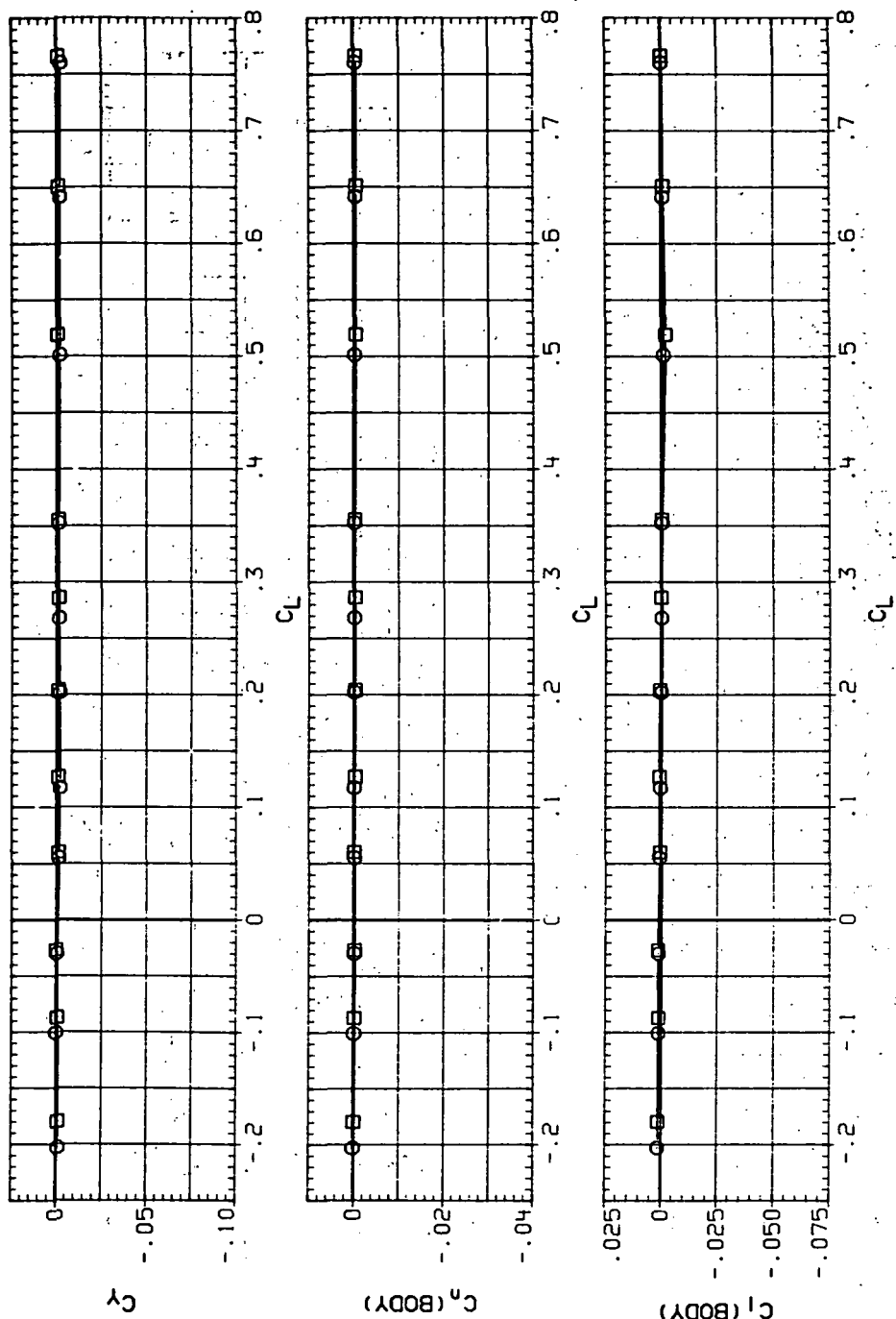


(d) L/D vs C_L .

Figure 95.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 84W58 (STEEL)
 RJR258 84W58 (STEEL)

RN/L
 6.230
 8.200

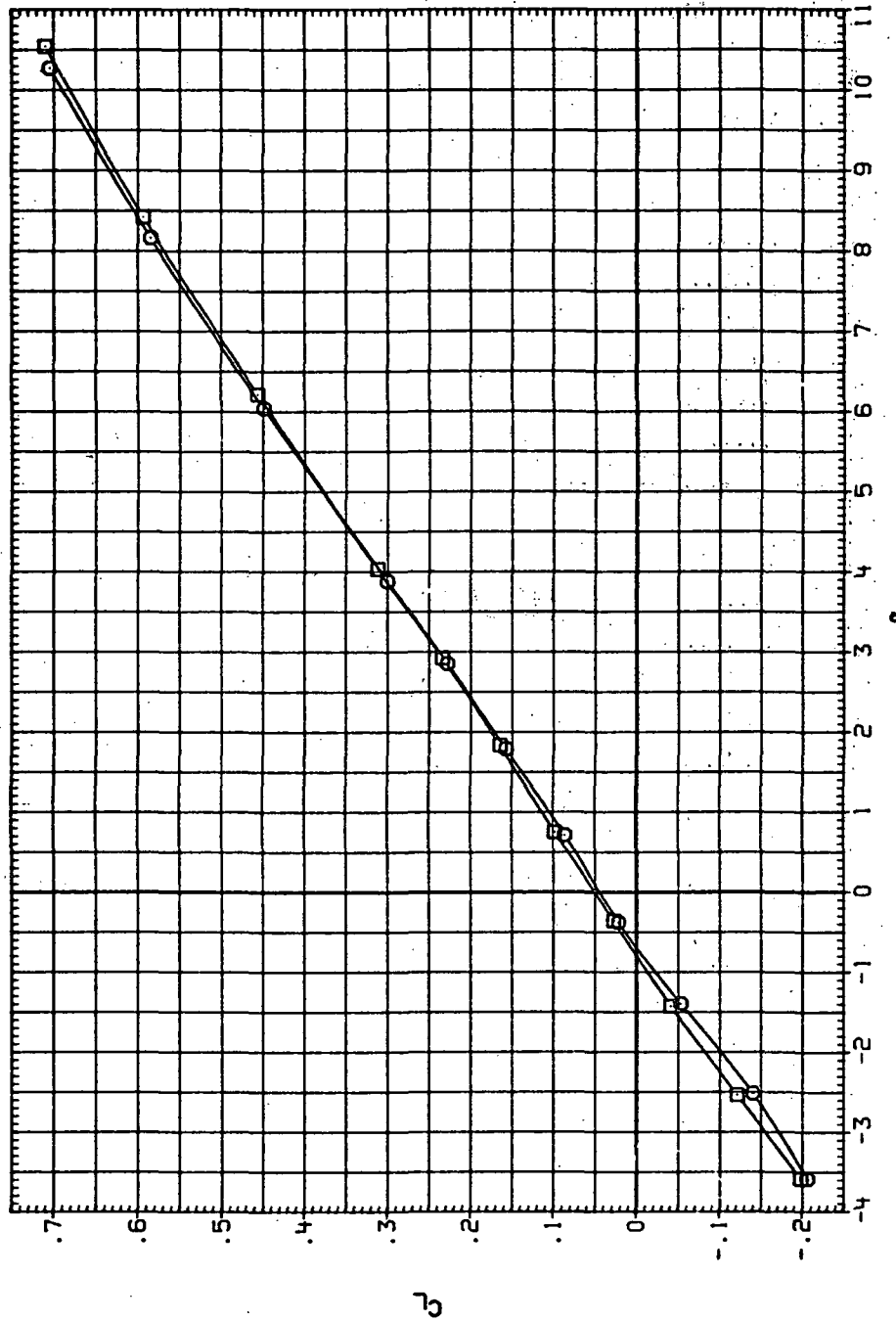


(e) C_Y , C_n and C_l vs C_L .

Figure 95.— Concluded.

DATA SYMBOL CONFIGURATION
 R-259 $\square$ BA5B (STEEL)
 R-258 $\square$ BA5B (STEEL)

RV/
 6.230
 8.200

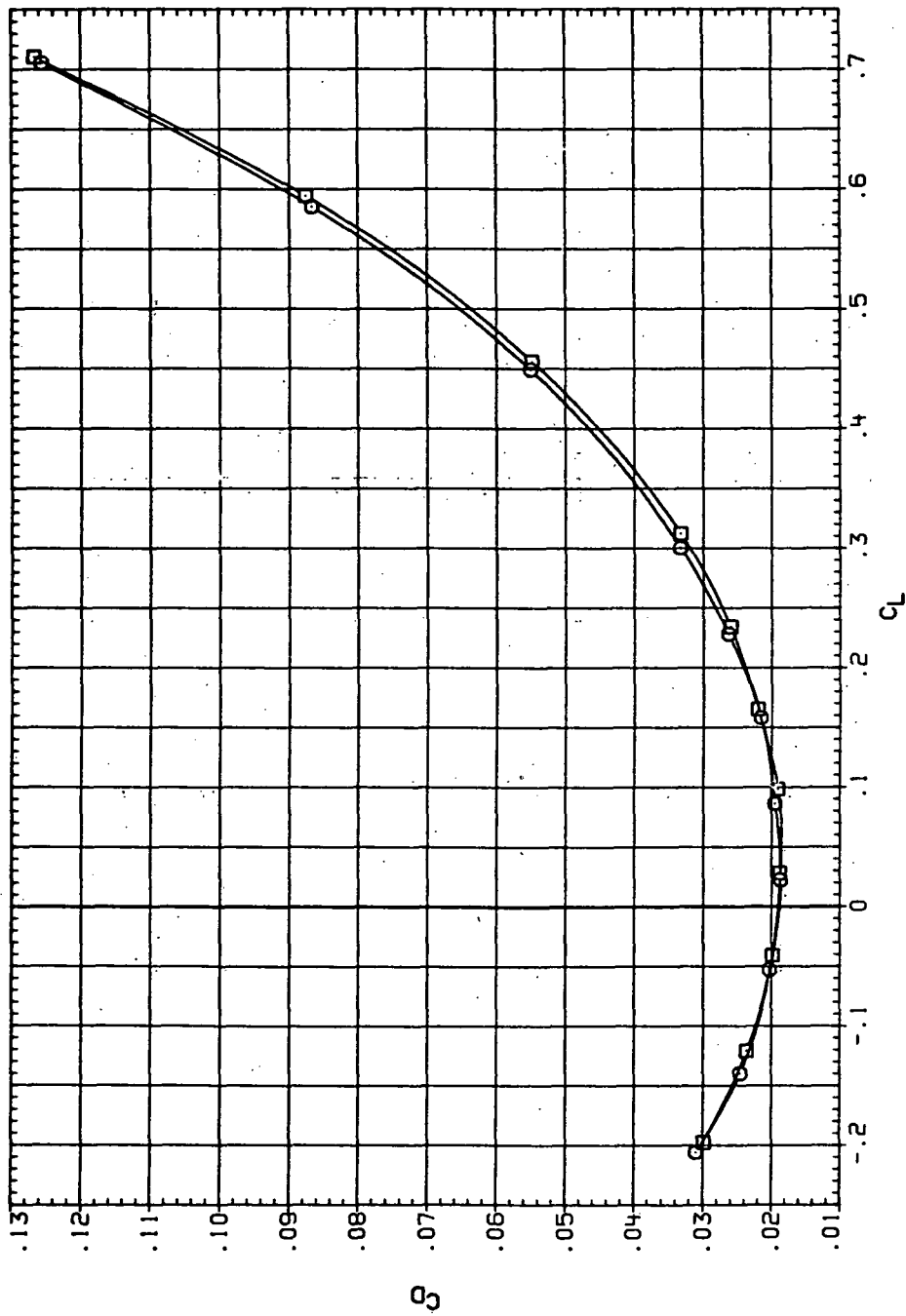


(a) C_L vs α .

Figure 96.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 1.2$ and the NACA 65A204 airfoil).

DATA --- SYMBOL CONFIGURATION
 RJR258  8A/5B (STEEL)
 RJR258  8A/5B (STEEL)

RN/L
 8.5
 8.200

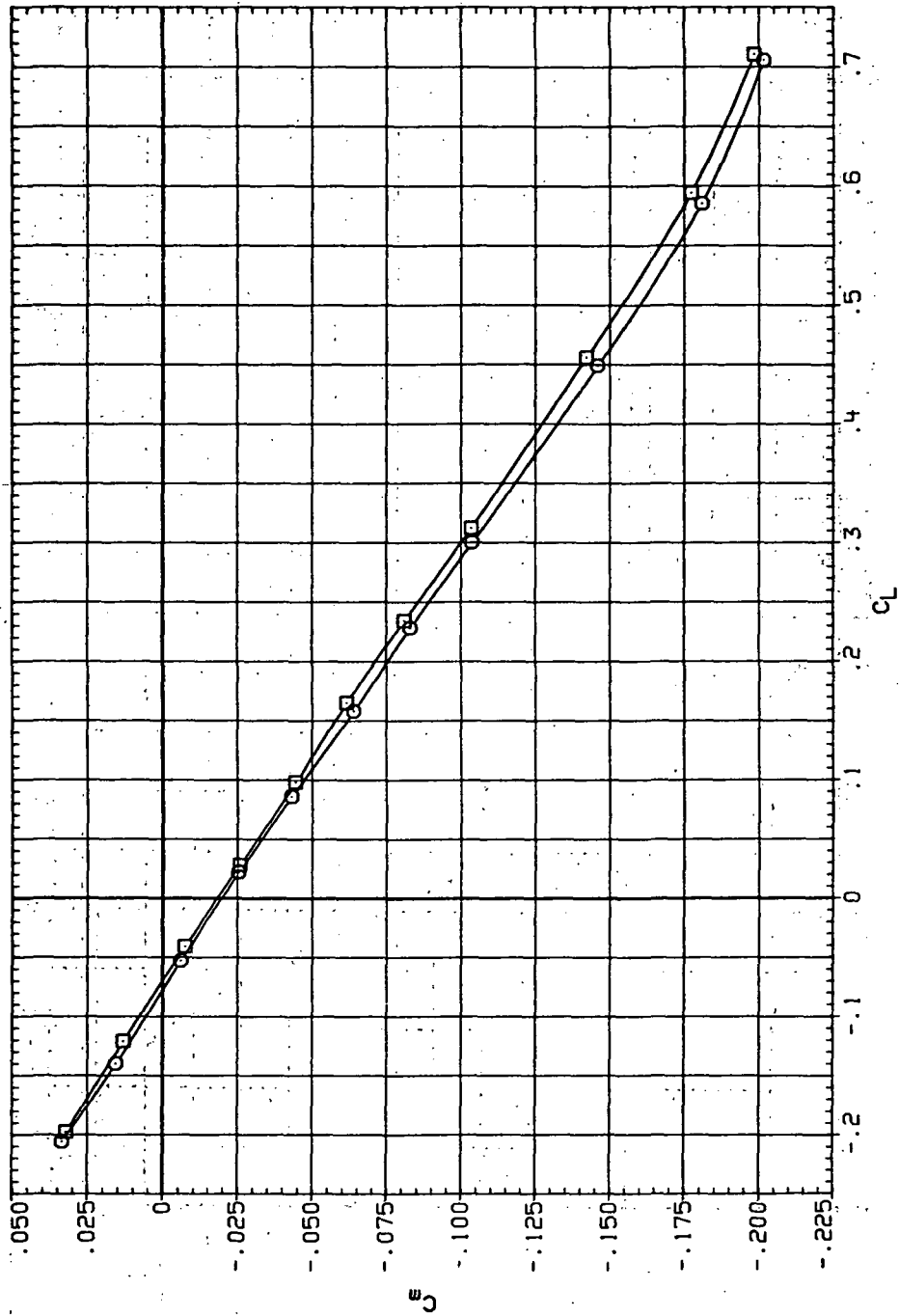


(b) C_D vs C_L .

Figure 96. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUP258 $\square$ 8W58 (STEEL)
 RUP258 $\circ$ 8W58 (STEEL)

RN/L
 8.230
 8.200

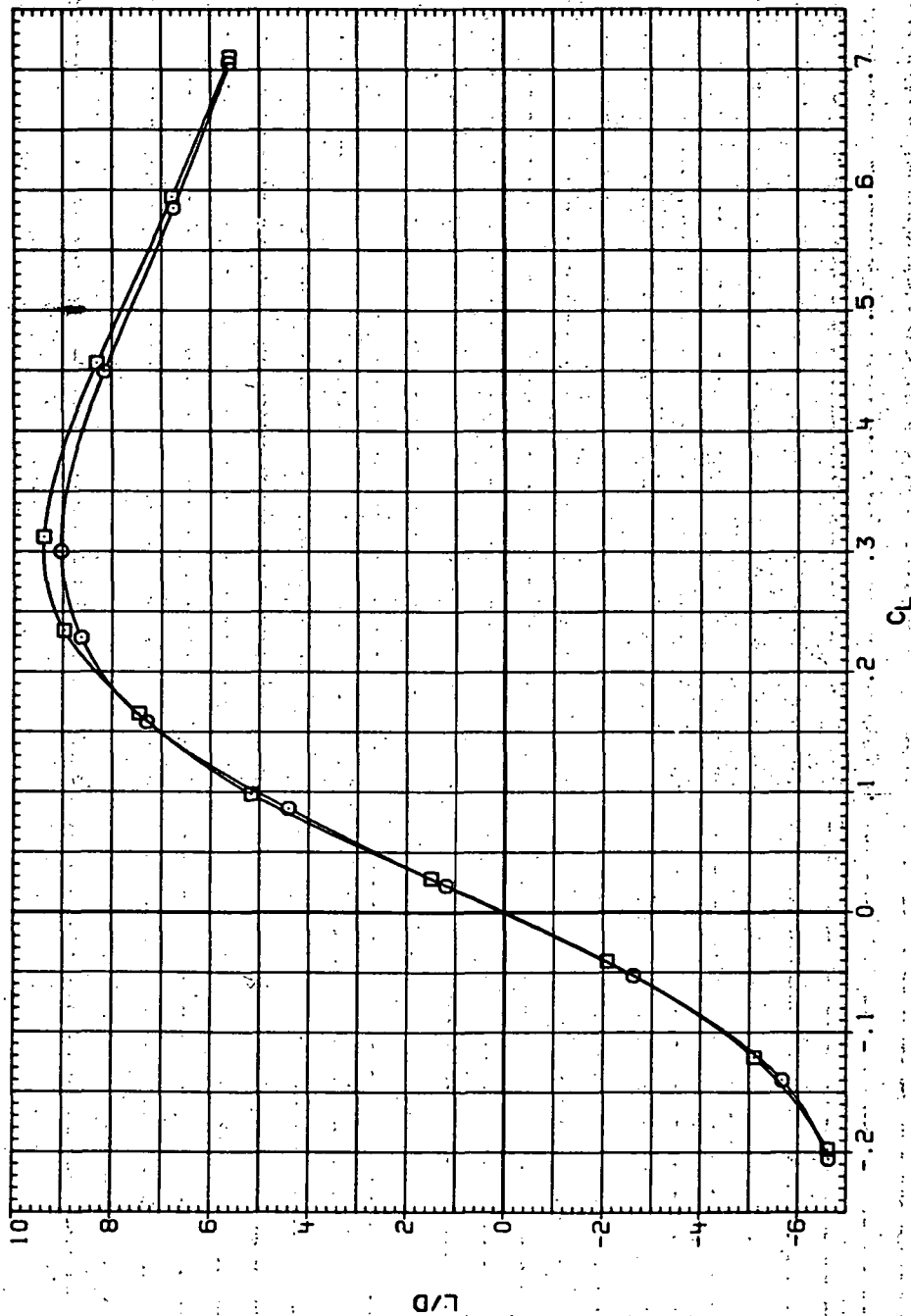


(c) C_m vs C_L

Figure 96.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 8M-58 (STEEL)
 RJR258 8M-58 (STEEL)

RV/L
 6.230
 6.200

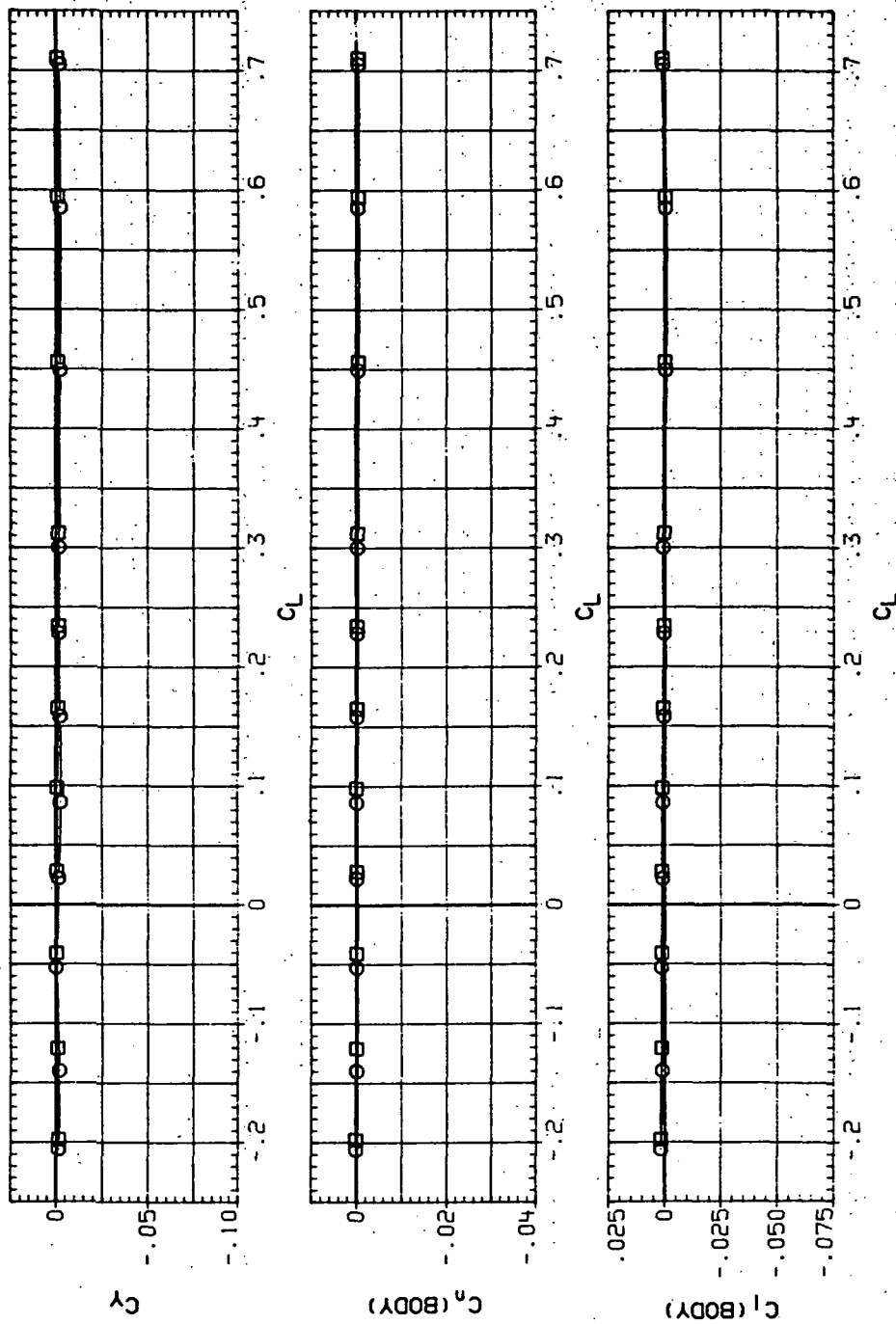


(d) L/D vs C_L .

Figure 96. — Continued.

DATA SET SYMBOL CONFIGURATION
 RUR259 $\square$ 8H/5B (STEEL)
 RUR258 $\circ$ 8H/5B (STEEL)

RV/L
 6.230
 8.200

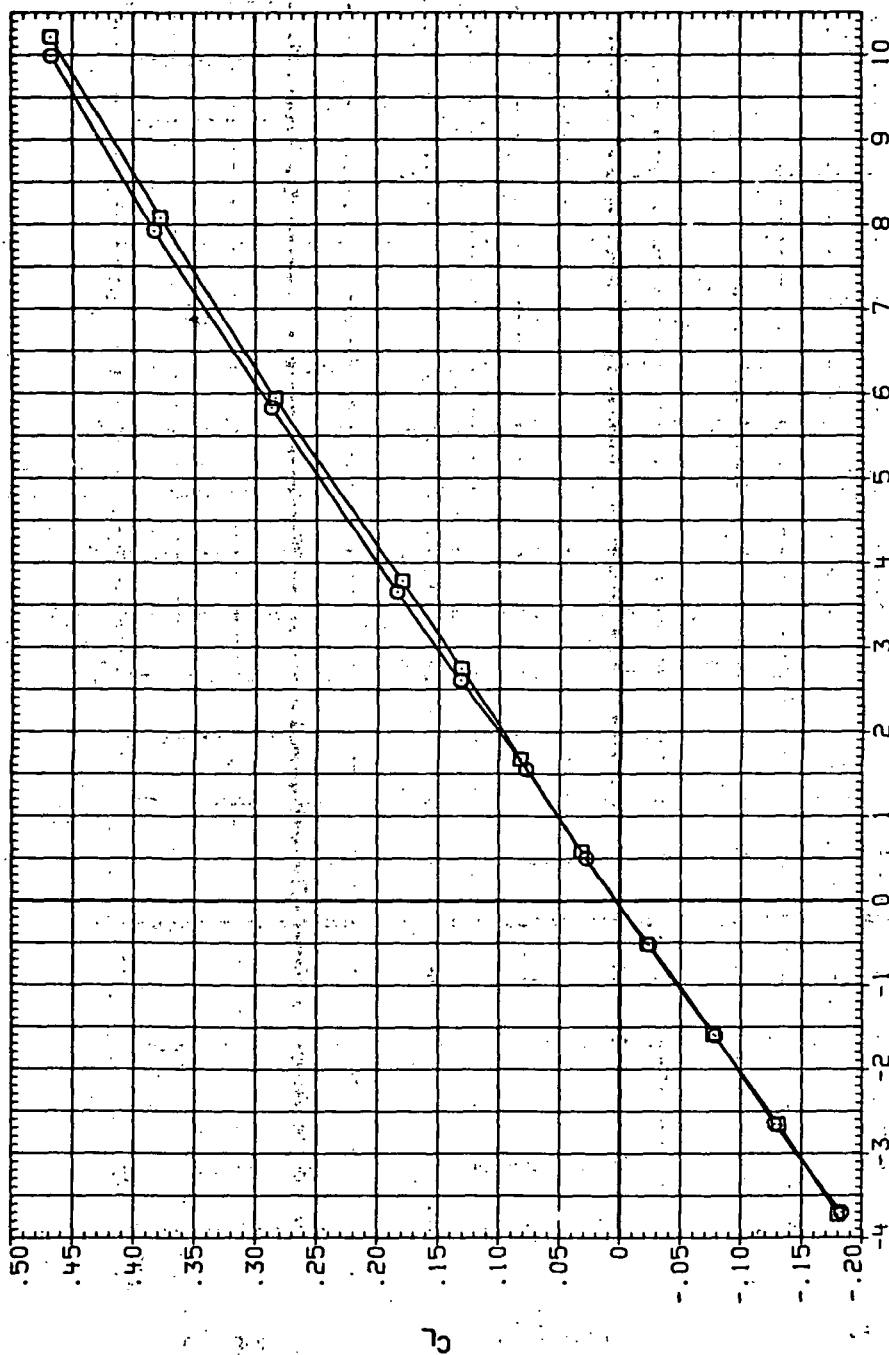


(e) C_Y , C_n and C_l vs C_L .

Figure 96.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR259 8A45B (STEEL)
 RJR258 8A45B (STEEL)

RN/L
 6,230
 6,200

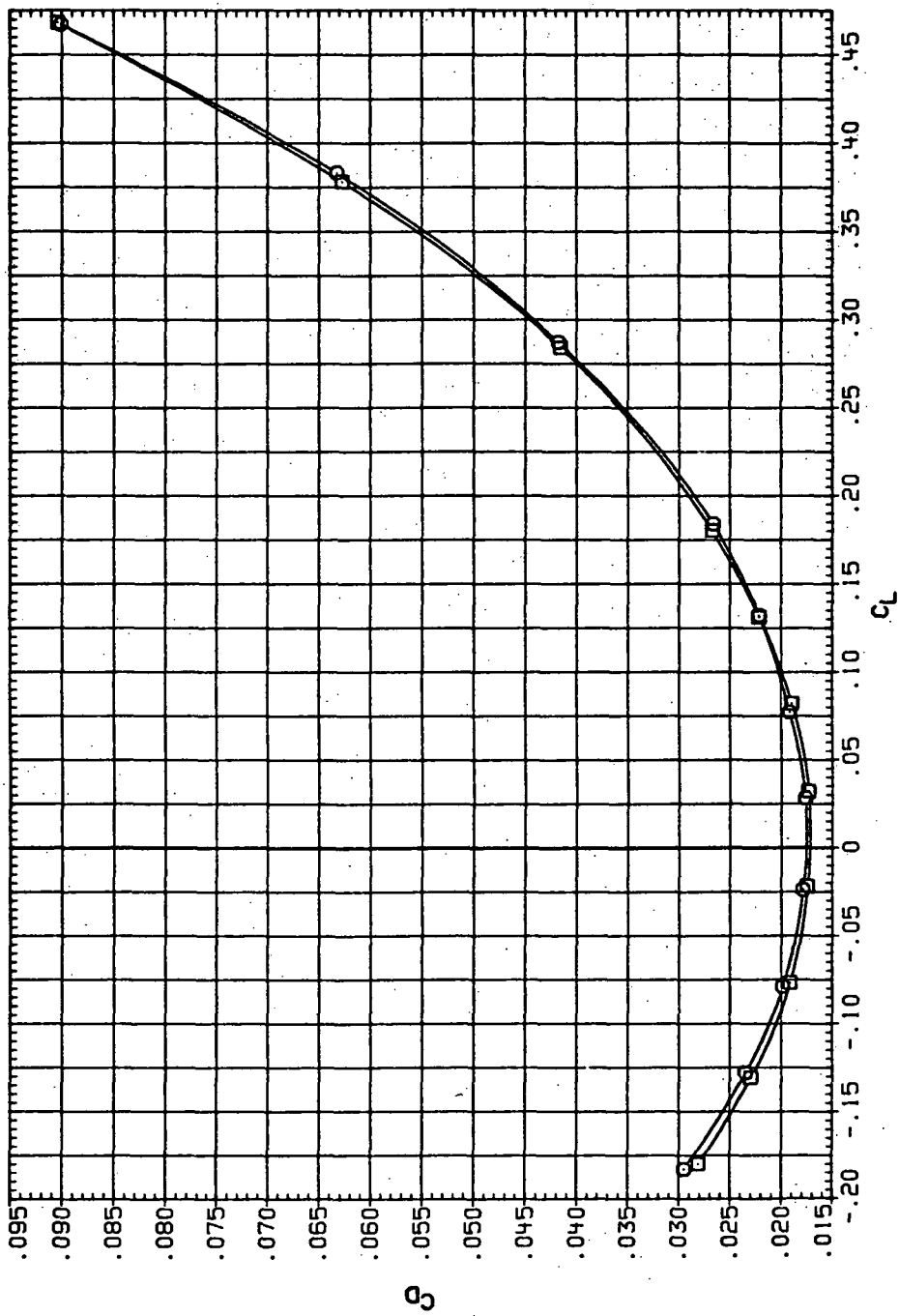


(a) C_L vs α .

Figure 97 — Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 1.6$ and the NACA 65A204 airfoil).

DATA ρ SYMBOL CONFIGURATION
 RJR259 $\square$ 8A+5B (STEEL)
 RJR258 $\square$ 8A+5B (STEEL)

Re/L
 6.230
 8.200

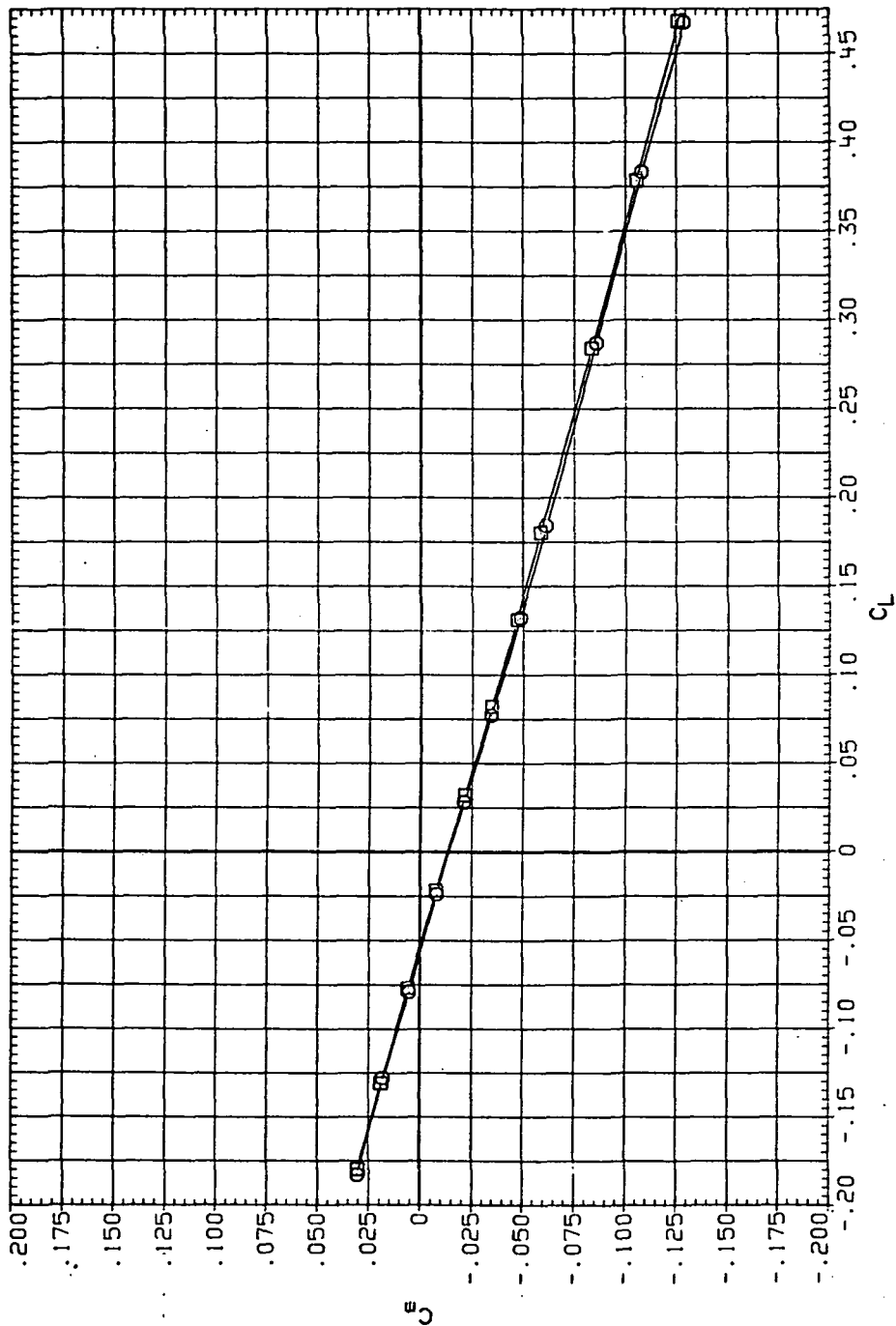


(b) C_D vs C_L

Figure 97.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ 8M-58 (STEEL)
 RJR258 $\square$ 8M-58 (STEEL)

RN/L
 6.230
 6.200

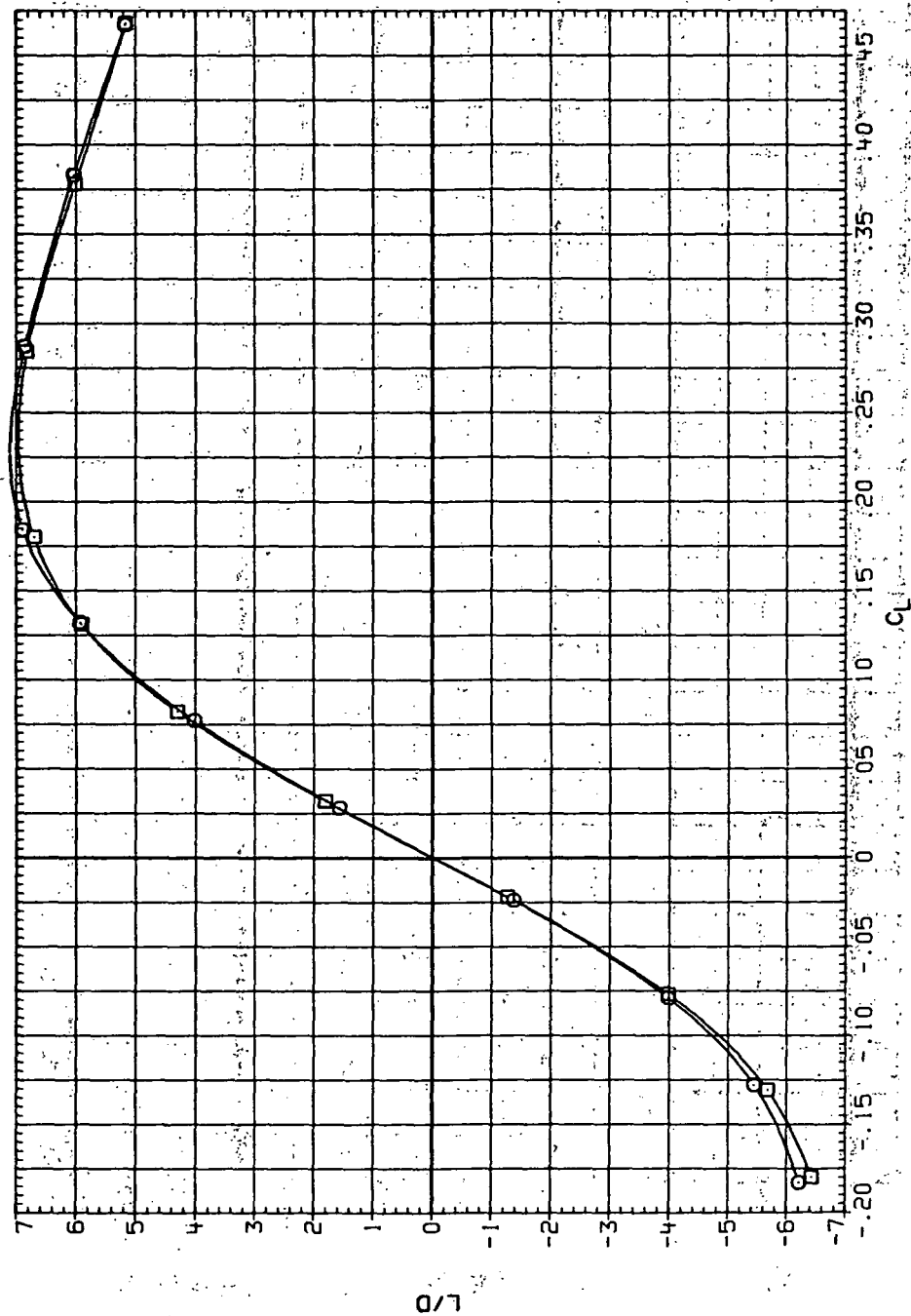


(c) C_m vs C_L .

Figure 97. — Continued.

DATA SYMBOL CONFIGURATION
 RJR2 BM5B (STEEL)
 RJR258 BM5B (STEEL)

RN/L
 6.2
 8.200

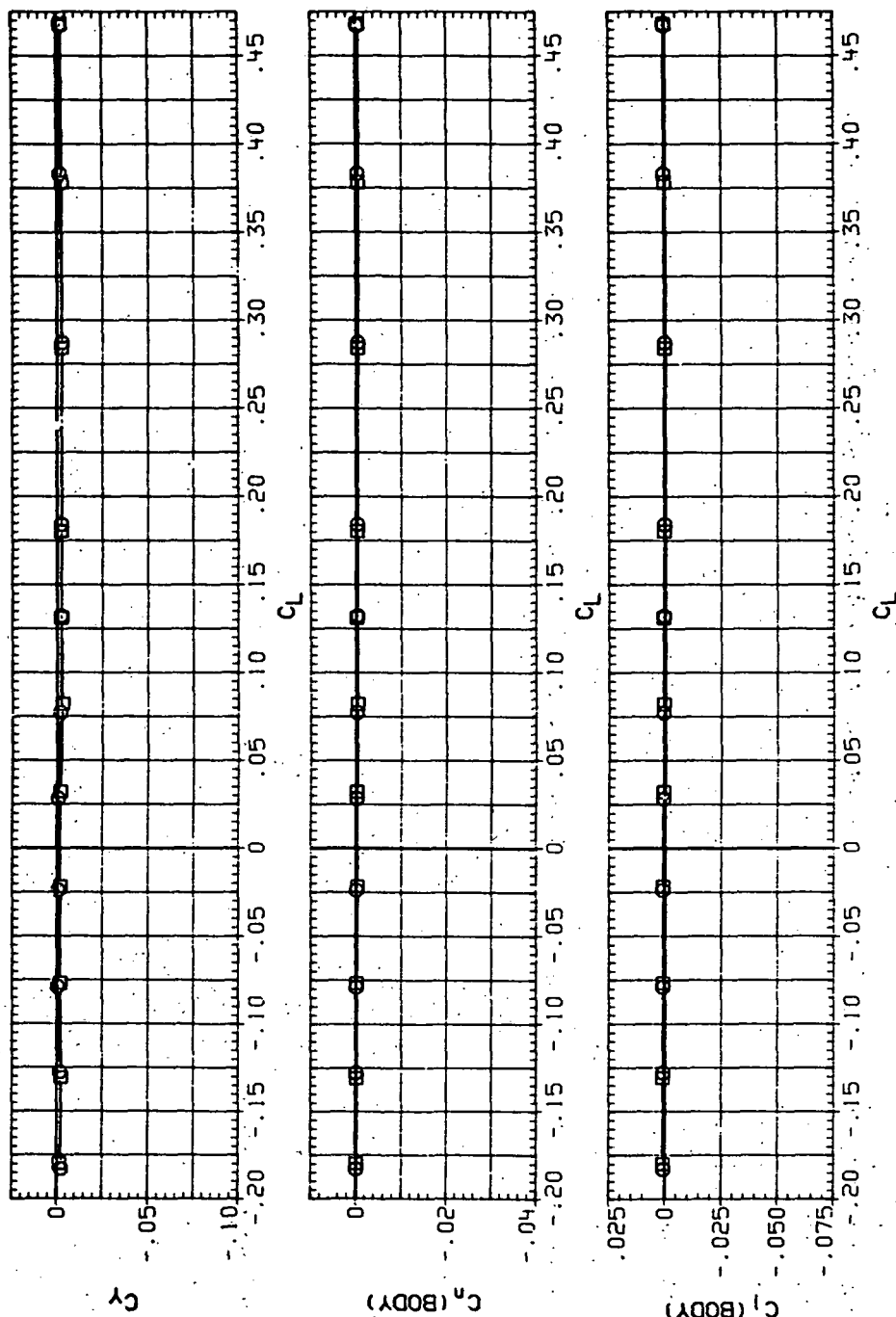


(d) L/D vs C_L

Figure 97.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 ○ BM-58 (STEEL)
 RJR258 □ BM-58 (STEEL)

RN/L
 6.230
 6.200

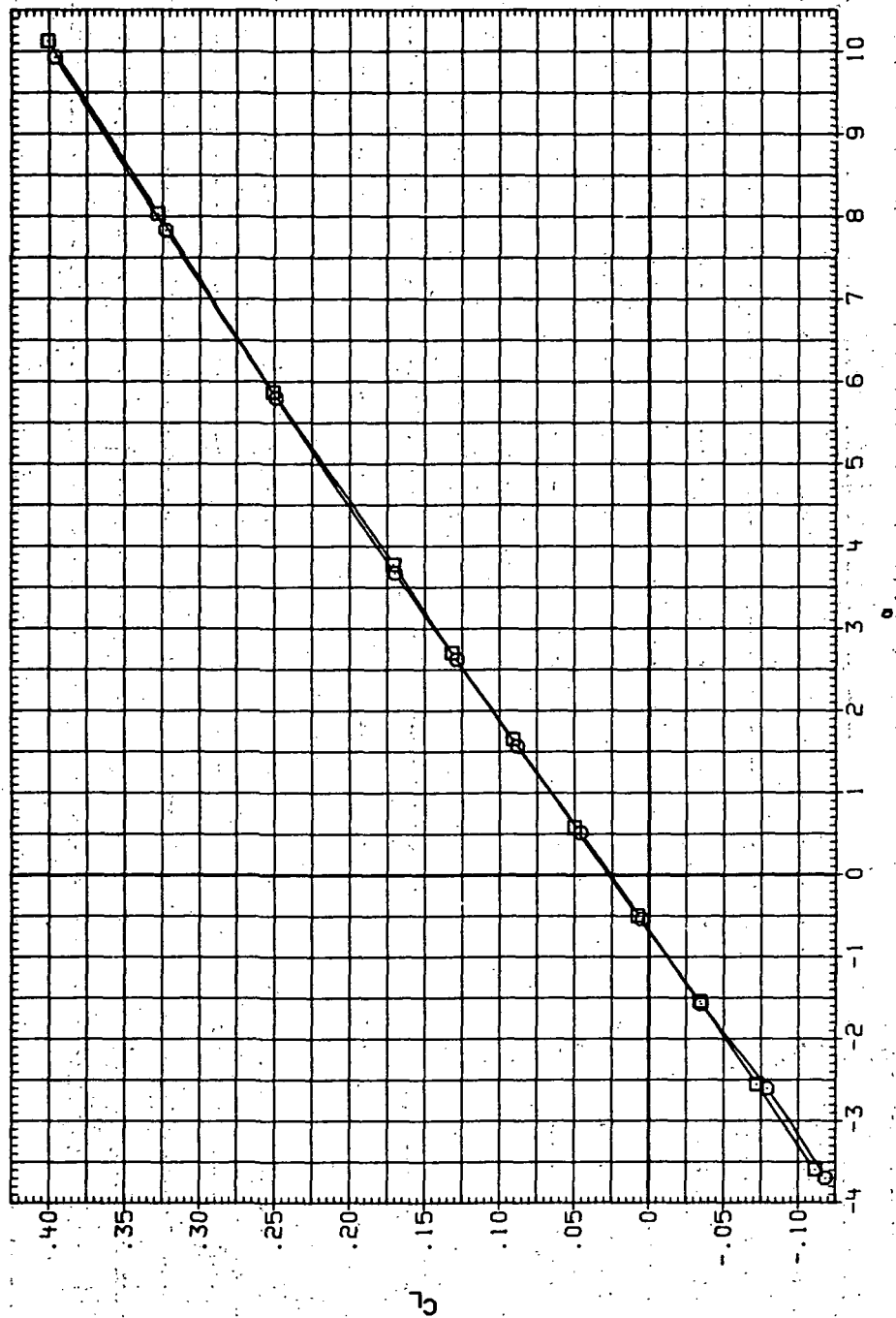


(e) C_Y , C_n and C_l vs C_L .

Figure 97.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR259 □ 8A458 (STEEL)
 RJR258 □ 8A458 (STEEL)

RV/L
 8.230
 8.200

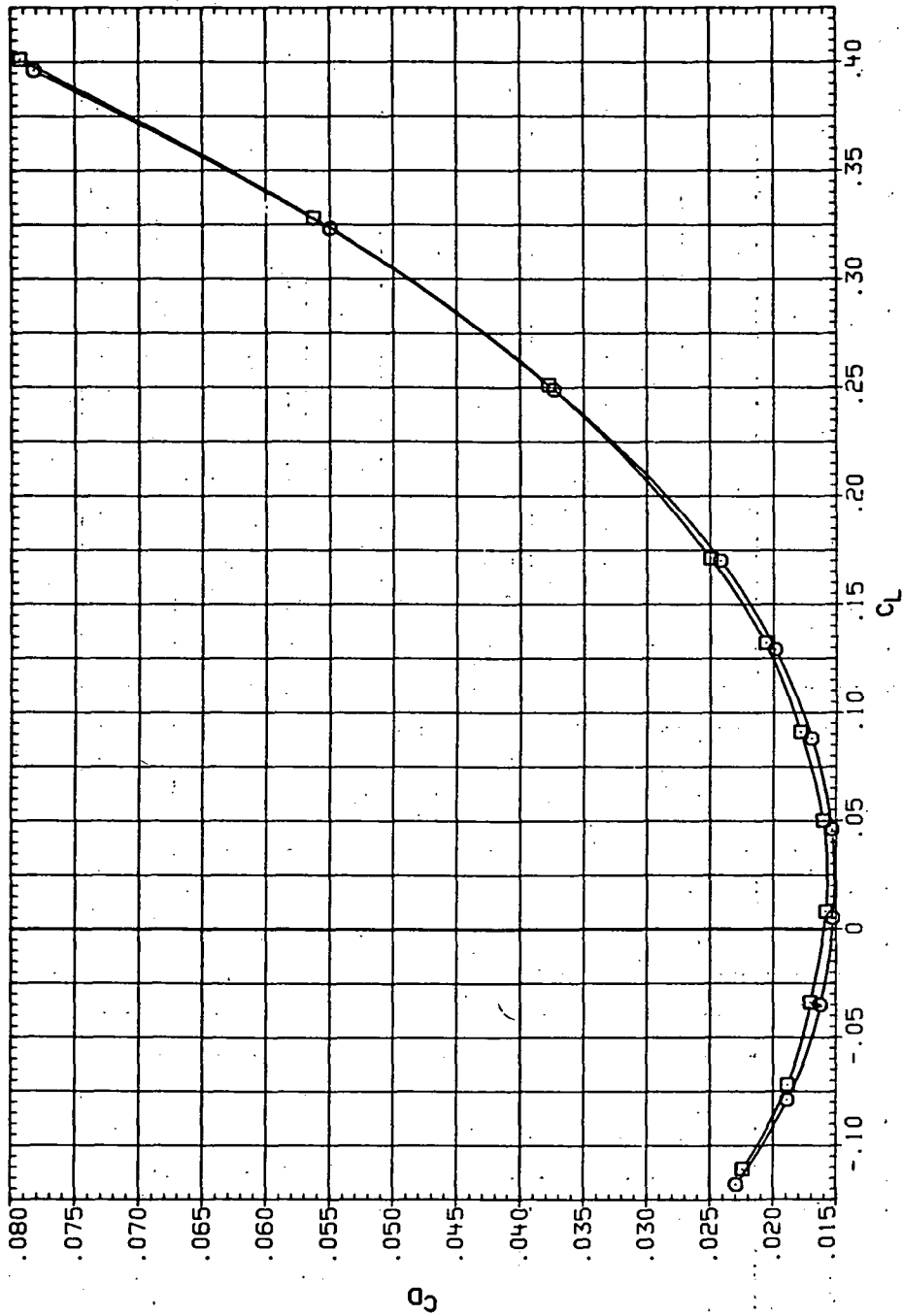


(a) C_L vs α .

Figure 98.— Reynolds-number effects on the aerodynamic characteristics of the steel swept wing-body combination ($M = 2.0$ and the NACA 65A204 airfoil).

DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ 8A45B (STEEL)
 RJR258 $\circ$ 8A45B (STEEL)

RV/LAW
 8.230
 8.200

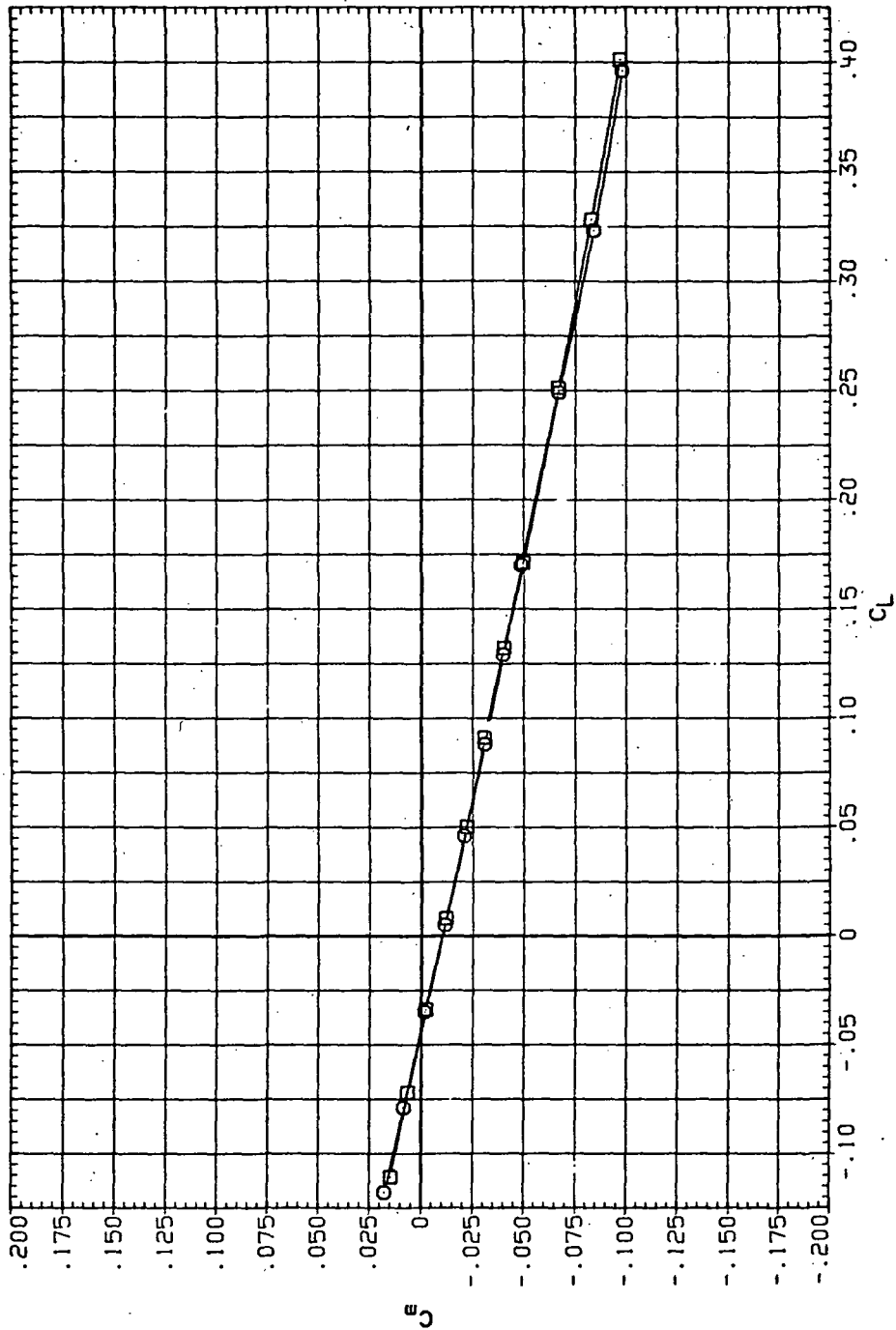


(b) C_D vs C_L .

Figure 98. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 $\square$ 8W458 (STEEL)
 RJR258 $\square$ 8W458 (STEEL)

RN/L
 8.230
 8.200

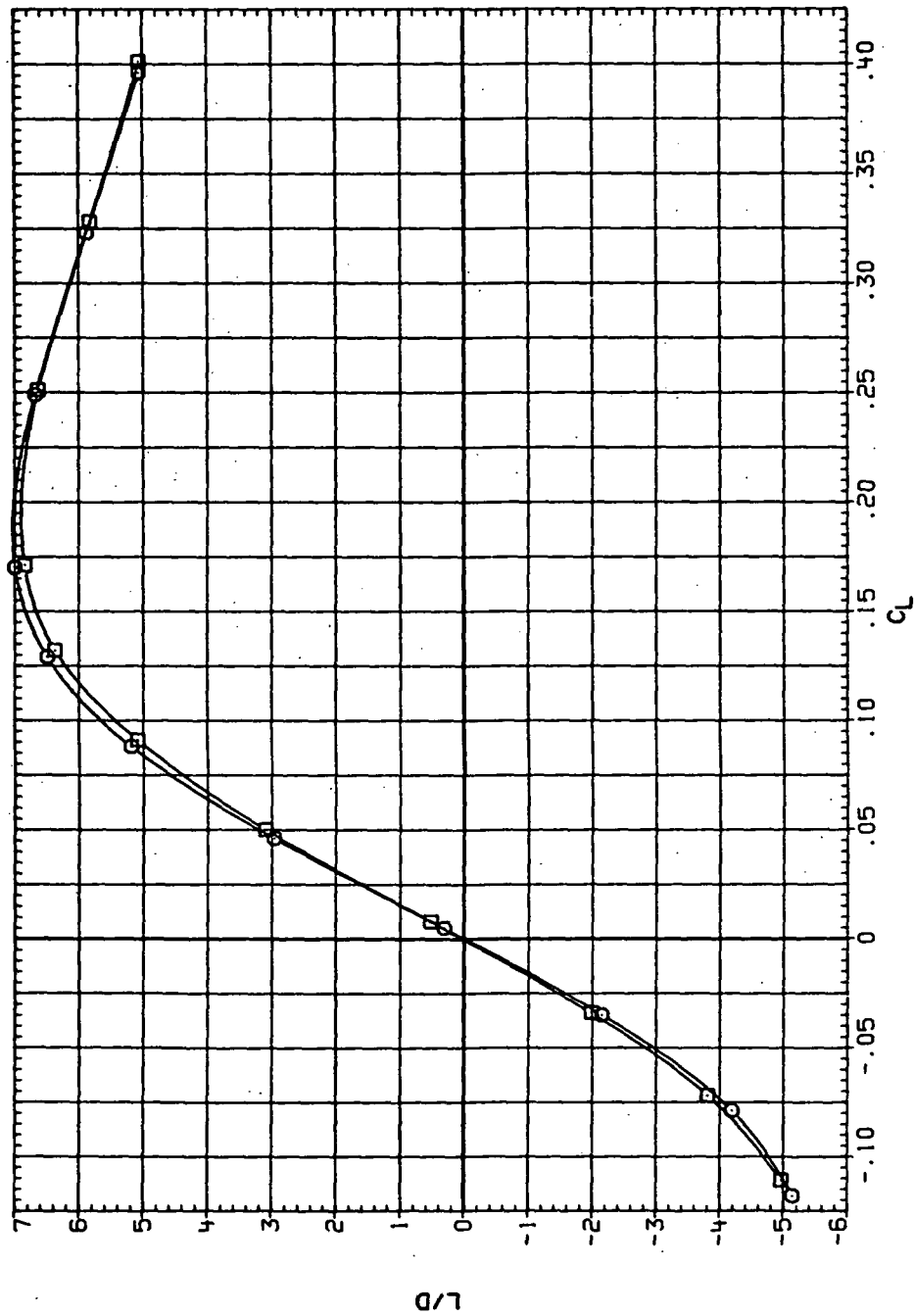


(c) C_m vs C_L .

Figure 98.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR259 8 BH58 (STEEL)
 RJR258 8 BH58 (STEEL)

RV/L
 6.230
 6.200

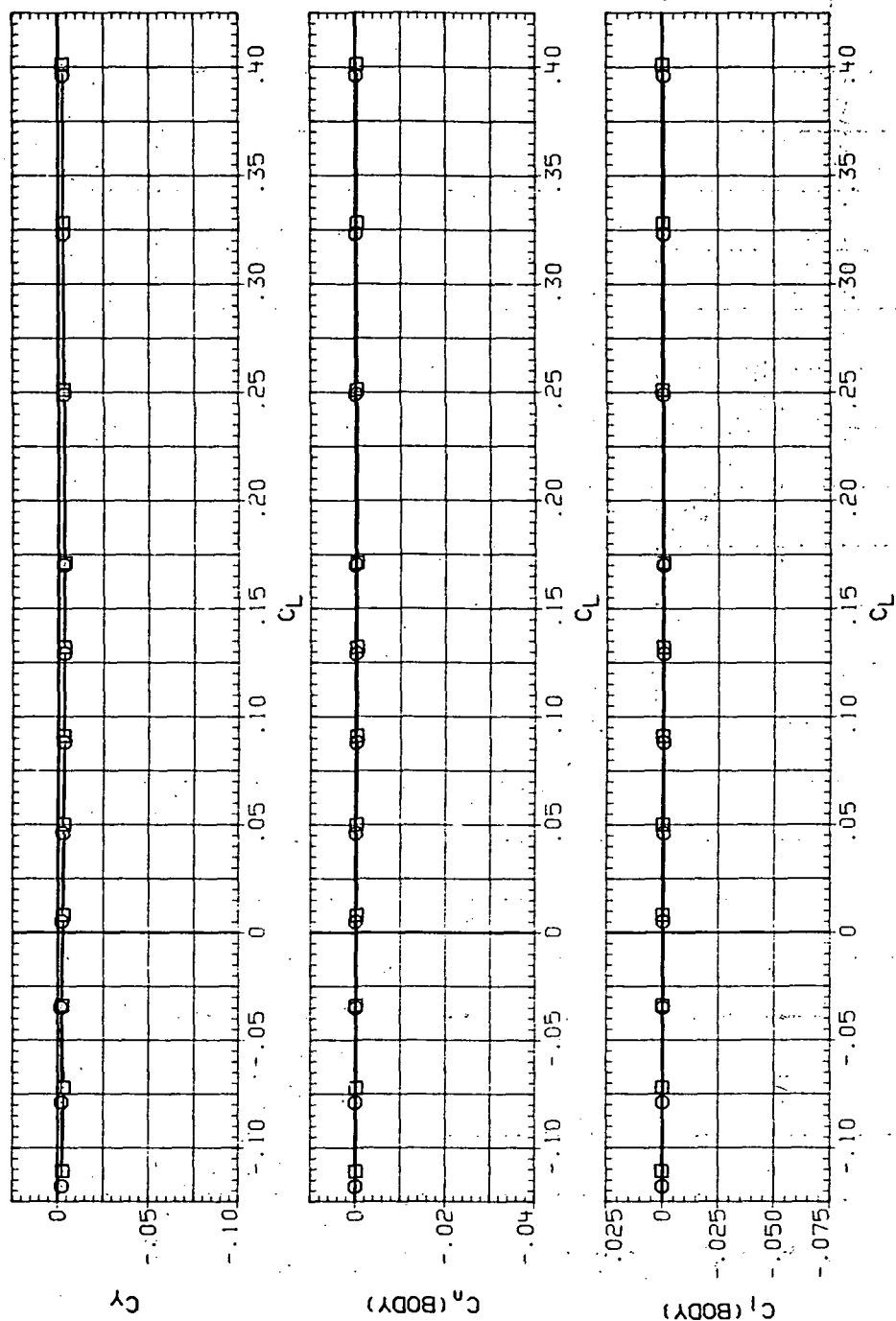


(d) L/D vs C_L .

Figure 98.— Continued.

DATA SET SYMBOL CONFIGURATION
 RUP258 □ 84W58 (STEEL)
 RUP258 □ 84W58 (STEEL)

RN/L
 6.230
 8.200

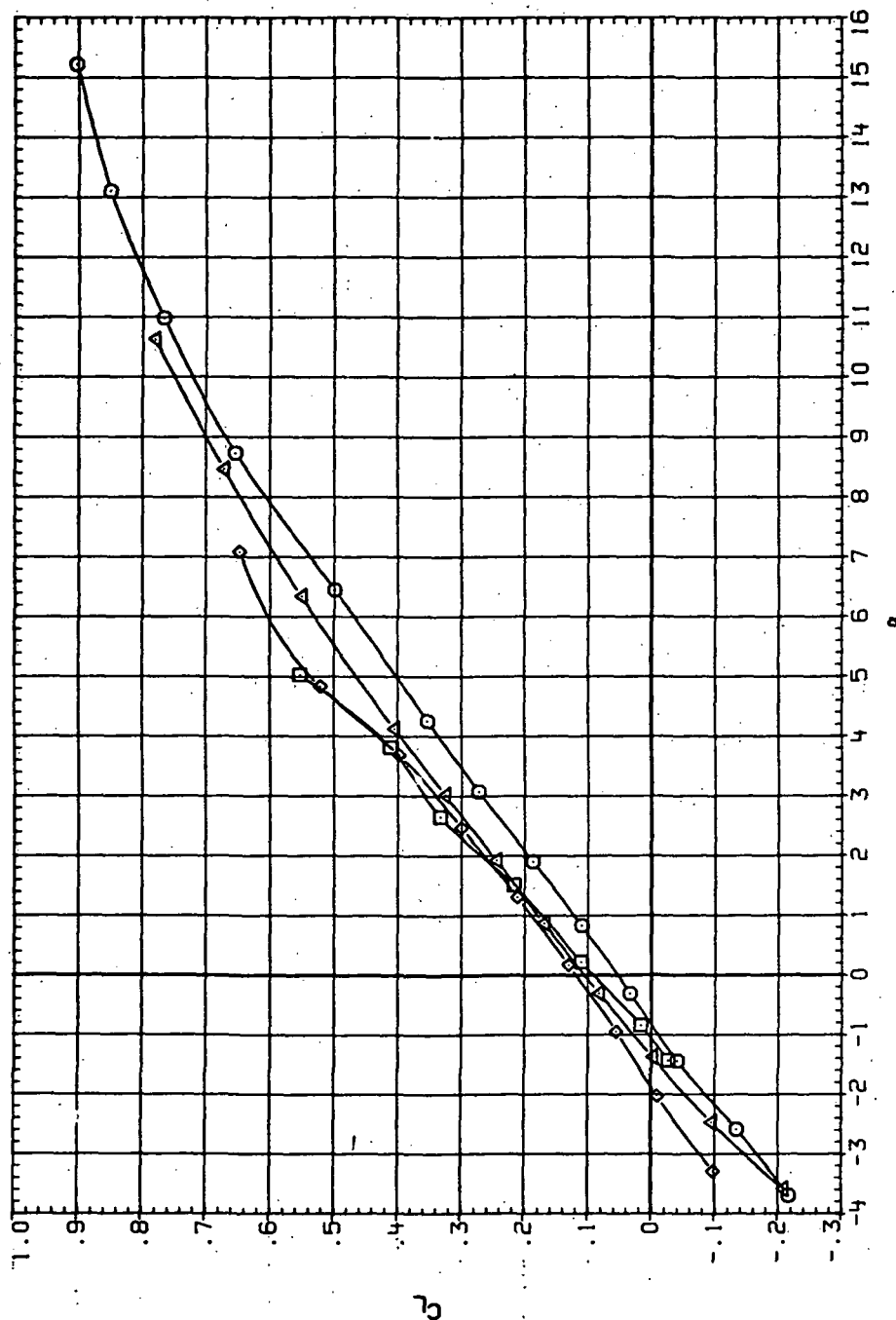


(e) C_Y , C_n and C_Q vs C_L .

Figure 98.— Concluded.

DATA SET SYMBOL CONFIGURATION
 RJR22 $\square$ 7M58 (STEEL)
 RJP006 $\square$ 6M58 (AL)
 RJR132 $\diamond$ 5M58 (AL)
 RJR258 $\triangle$ 6M58 (STEEL)

RN/L
 8.20
 8.200
 8.200

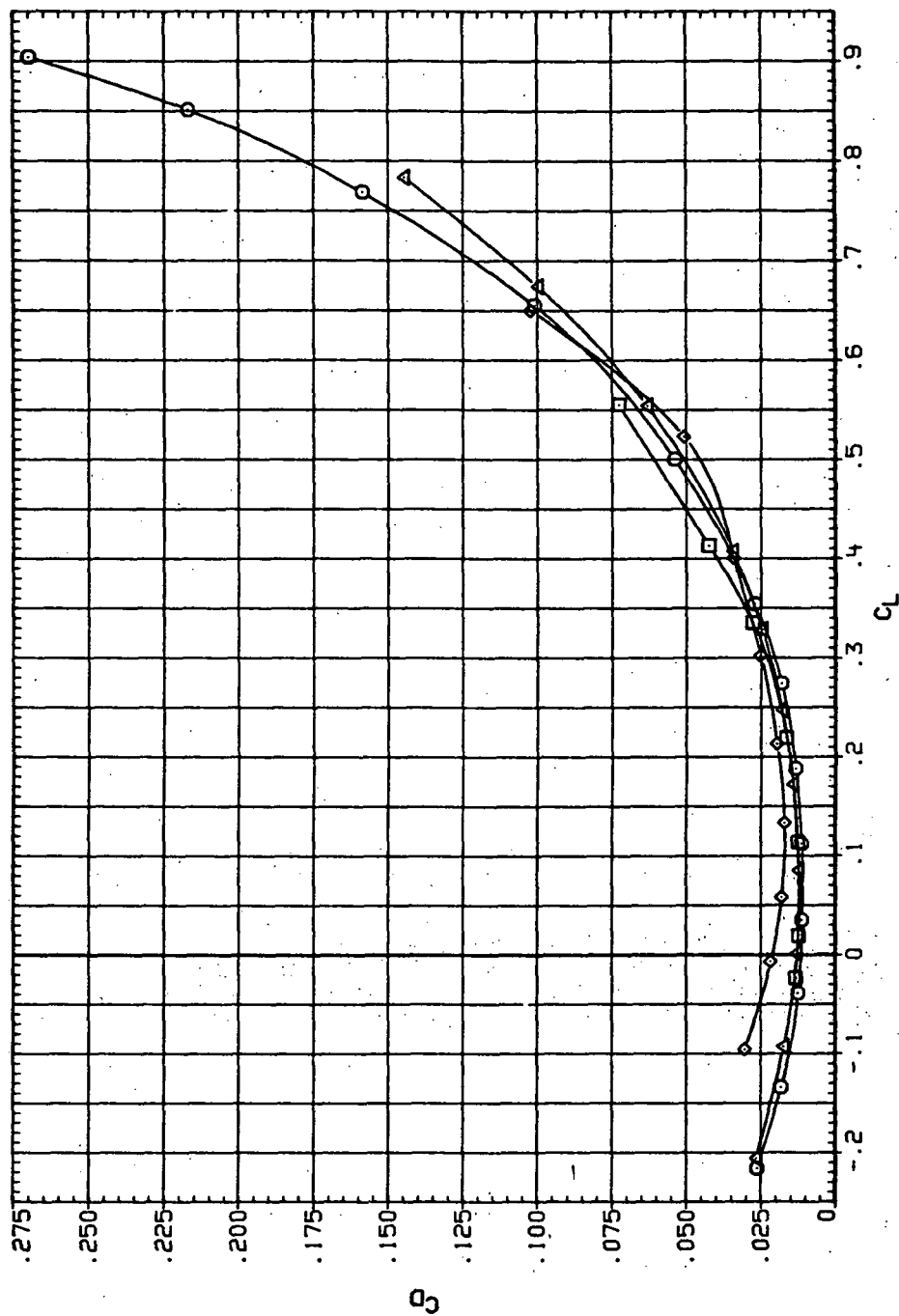


(a) C_L vs α .

Figure 99.— Flexibility effects, airfoil modification effects and planform effects on the aerodynamic characteristics ($\Lambda = 45^\circ$ and $M = 0.95$).

DATA SET SYMBOL CONFIGURATION
 RJR223 ○ 74458 (STEEL)
 RJP008 □ 64458 (AL)
 RJR132 ◇ 94458 (AL)
 RJR258 △ 84458 (STEEL)

RV/L
 8.200
 8.200
 8.200
 8.200

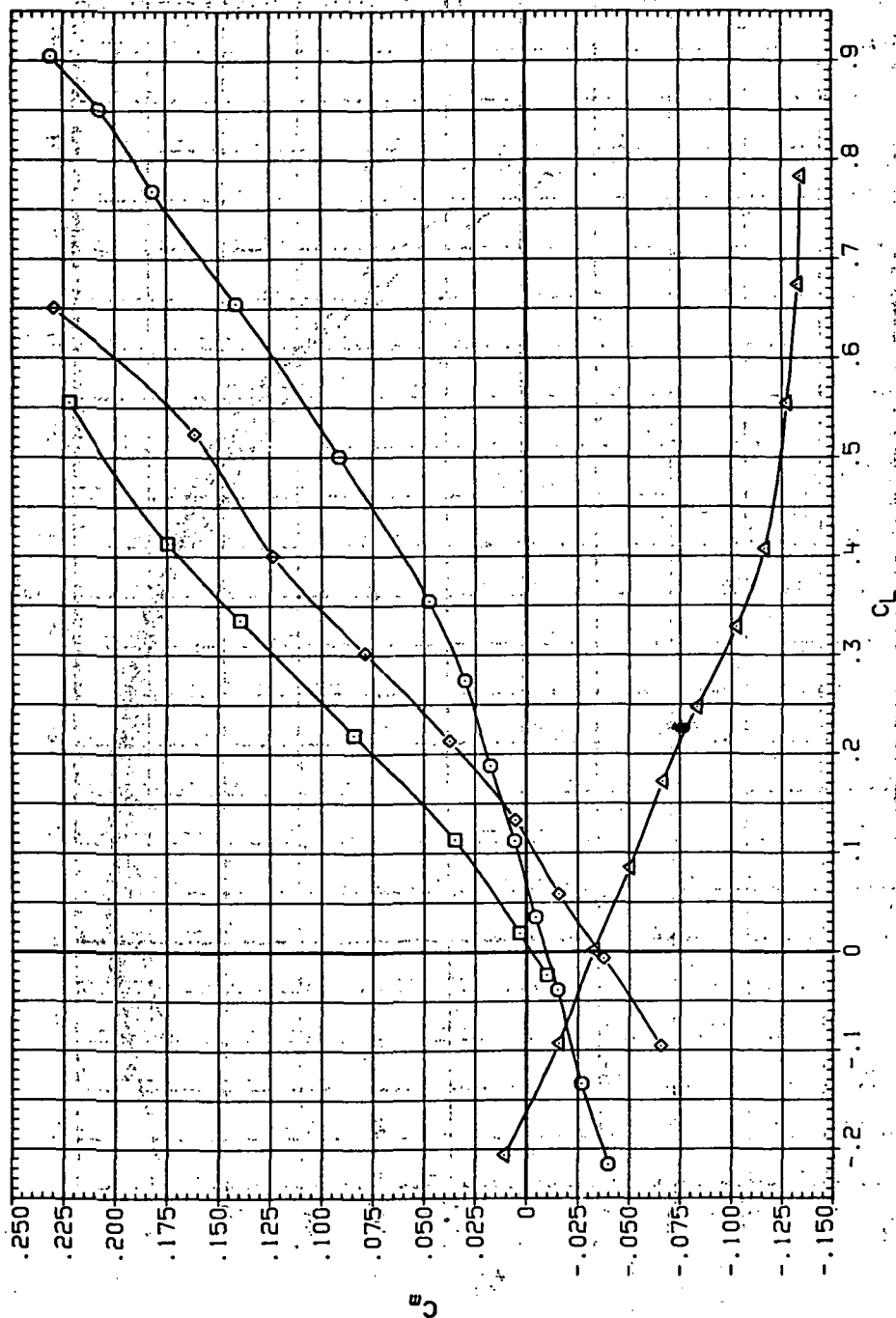


(b) C_D vs C_L .

Figure 99.— Continued.

DATA SET SYMBOL CONFIGURATION
 RJR223 74458 (STEEL)
 RJR108 64458 (AL)
 RJR132 84458 (AL)
 RJR258 84458 (STEEL)

RN/L
 8.200
 8.200
 8.200
 8.200



(c) C_m vs C_L

Figure 99.— Continued.

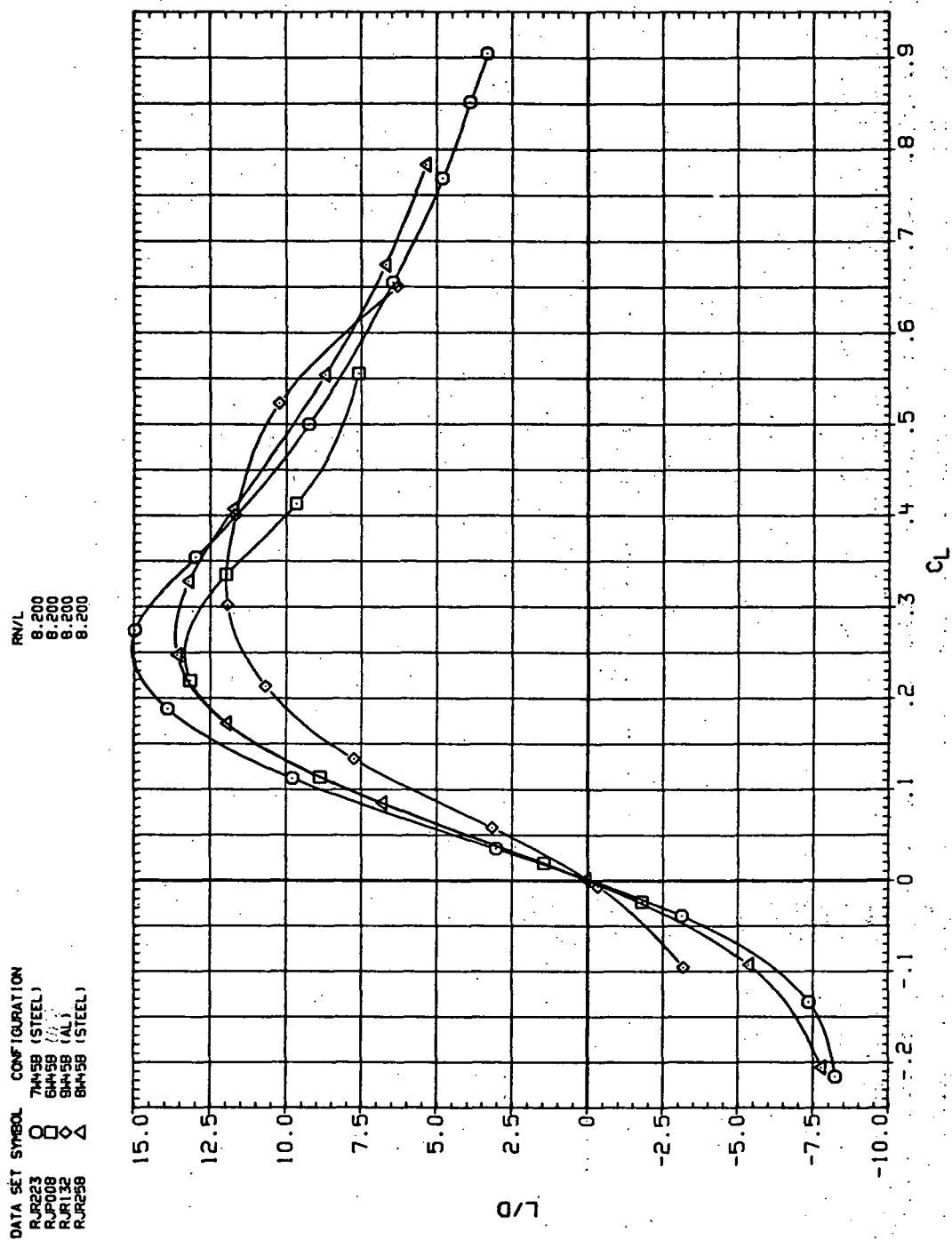
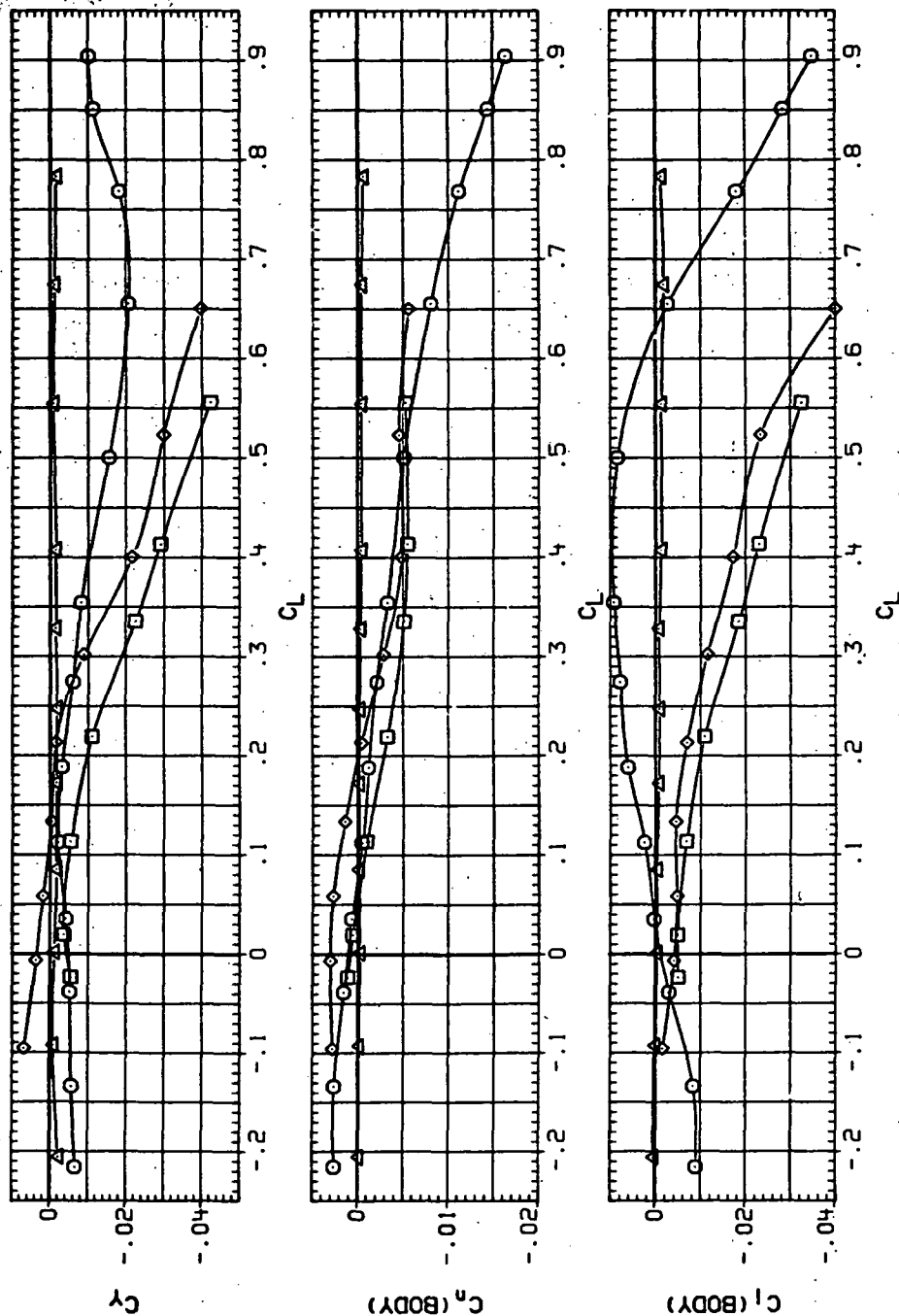
(d) L/D vs C_L .

Figure 99. — Continued.

DATA SET SYMBOL CONFIGURATION
 RJP223 7M-58 (STEEL)
 RJP008 6M-58 (AL)
 RJA132 5M-58 (AL)
 RJP258 6M-58 (STEEL)

BN/L
 8.200
 8.200
 8.200
 8.200



(e) C_Y , C_n and C_l vs C_L .

Figure 99.— Concluded.



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